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STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
AND
OFFICE OF THE LEGISLATIVE AUDITOR
SPECIAL REPORT



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STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
AND
OFFICE OF THE LEGISLATIVE AUDITOR

SPECIAL REPORT



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STATE OF MONTANA



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March 1994

DEPUTY LEGISLATIVE AUDITORS:

MARY BRYSON
Operations and EDP Audit
JAMES GILLETT
Financial-Compliance Audit
JIM PELLEGRINI

Performance Audit

The Legislative Audit Committee of the Montana State Legislature:

Enclosed is the report on the utility relocation audit of the Department of Transportation and eight utility companies for Federal Highway Projects BRF 4-2(10)45, Laurel Bridge, and BRF 16-1(27)1, East Bridge-Billings.

The audit was conducted by Anderson ZurMuehlen & Co., P.C., under a contract between the firm and our office. The comments and recommendations contained in this report represent the views of the firm and not necessarily the Legislative Auditor.

The agency's and utility companies' written responses to the report recommendations are included in the back of the audit report.

Respectfully submitted,

Scott A. Seacat Legislative Auditor

MONTANA DEPARTMENT OF TRANSPORTATION UTILITY RELOCATION PORTION OF FEDERAL HIGHWAY PROJECTS BRF 4-2(10)54 - LAUREL BRIDGE AND BRF 16-1(27)1 - EAST BRIDGE-BILLINGS

Summary of Recommendations

The listing below is a summary of the recommendations for the Montana Department of Transportation (MDOT) contained in this report, the MDOT's response thereto, and a reference to the complete comments in the report. Under the terms of our contract, the report also contains recommendations for the various utility companies that participated in the projects. The utility companies' responses to those recommendations are contained in the report; however, they are not included on this summary.

Recommendation #1

The MDOT should work with the utility companies to establish documentation guidelines for costs claimed for reimbursement. The guidelines should specifically describe the minimum documentation criteria. They should emphasize that cost claims not meeting the documentation criteria will not be processed for payment.

Agency Response: Partially Concur. See page 84.

Recommendation #2

The MDOT should evaluate the methods and means currently used to communicate the requirements of a utilities relocation project to participating utilities to determine whether improvements can be made.

Agency Response: Concur. See page 85.

Recommendation #3

The MDOT should review and, if necessary, revise its contract preparation procedures to ensure contracts contain references to the appropriate regulations. A one-page "checklist" of critical items might be developed and used when non-standard contracts are prepared.

Agency Response: Partially concur. See page 86.

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Recommendation #4

Internal procedures should be reviewed and revised as necessary to ensure that critical issues identified during contract reviews performed by the audit division are resolved before significant costs are incurred on the project.

Agency Response: Do not concur. See page 86.

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INDEPENDENT AUDITOR'S REPORT

To the State of Montana
Department of Transportation and
Office of the Legislative Auditor

Federal Highway Project BRF 4-2(10)45 - Laurel Bridge

We have audited the accompanying schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 4-2(10)45 - Laurel Bridge. This schedule is the responsibility of the Montana Department of Transportation's management. Our responsibility is to report on this schedule based on our audit.

We conducted our audit in accordance with generally accepted auditing standards and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedules are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the schedule. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the schedule. We believe that our audit provides a reasonable basis for our report.

In our opinion, the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 4-2(10)45 - Laurel Bridge presents fairly, in all material respects, the costs for that portion of the project in conformity with generally accepted accounting principles.

Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings

We were engaged to audit the accompanying schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings. This schedule is the responsibility of the Montana Department of Transportation's management. Our responsibility is to report on this schedule based on our audit.

We were unable to audit the percentage(s) used as markup(s) or multiplier(s) applied to labor costs charged by the prime contractor, Willbros Butler Engineers, Inc., on that portion of the East Bridge-Billings project performed as a joint venture by Montana-Dakota Utilities Co., Cenex, Exxon Pipeline Company, Yellowstone Pipe Line Company, and Conoco Pipe Line Company. Accordingly, approximately \$374,000 of costs claimed for reimbursement were not subject to audit.

Because we were not able to apply audit procedures to satisfy ourselves about professional service charges billed to the joint venture participants by Willbros Butler Engineers, Inc., as discussed in the preceding paragraph, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings.

Project costs claimed for reimbursement on the East Bridge-Billings pipeline relocation by the various utility companies include approximately \$467,000 of additional costs questioned for noncompliance with various federal and state laws and regulations. The ultimate resolution of the questioned costs is determined by representatives of the federal and state agencies involved in the project.

This report is intended solely for the information and use of the Montana Department of Transportation, the State of Montana Office of the Legislative Auditor, the Federal Highway Administration, and the participating utilities, and should not be used for any other purpose. However, this report is a matter of public record and its distribution is not limited.

anderson Zur Muchlen & Co., P.C.

Helena, Montana November 30, 1993

MONTANA DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY PROJECT BRF 4-2(10)54 - LAUREL BRIDGE SCHEDULE OF THE PIPELINE RELOCATION PORTION OF PROJECT COSTS

Labor	\$ 11,372
Personal expenses	23,561
Materials	295,826
Contracts:	
Construction	376,561
Other	14,202
Other costs	3,602
Overhead	101,582
Total project costs	826,706
Less: Exxon Pipe Line Company	
participation (19% of costs)	(157,074)
Costs claimed for reimbursement	<u>\$ 669,632</u>



SCHEDULE OF THE PIPELINE RELOCATION PORTION OF PROJECT COSTS FEDERAL HIGHWAY PROJECT BRF 16-1(27)1 - EAST BRIDGE-BILLINGS MONTANA DEPARTMENT OF TRANSPORTATION

TOTAL	\$ 127,811 33,126 522,267	518,335 2,253,590 156,694 317,175	3,928,998	(592,970)	\$ 3,336,028
CONOCO PIPELINE COMPANY (SEMINOE)	\$ 4,817 1,007 55,362	56,276 307,588 23,075 57,989	506,114	(13,740)	\$ 492,374
YELLOWSTONE PIPELINE COMPANY	\$ 4,817 1,007 62,362	60,359 295,420 19,887 57,434	501,286	(117,451)	\$ 383,835
EXXON PIPELINE COMPANY	\$ 4,917	106,534 343,878 22,892 91,797	747,489	(224,247)	\$ 523,242
CENEX	\$ 940	111,395 341,100 28,197	598,579	(33,383)	\$ 565,196
MONTANA- DAKOTA UTILITIES CO	\$ 19,541 1,537 58,118	109,461 338,761 27,912 47,209	602,539	(135,270)	\$ 467,269
CONOCO PIPELINE COMPANY (GLACIER)	\$ 73,932 29,575 45,201	319,906 21,348 62,746	552,708	(32,665)	\$ 520,043
LOCKWOOD WATER USERS ASSOCIATION	\$ 1,932	74,310 293,545 13,299	386,053	(36,214)	\$ 349,839
MONTANA SULPHUR & CHEMICAL COMPANY	\$ 16,915	13,392	34,230		\$ 34,230
	Company labor Personal expenses Materials	Contracts: Engineering services Construction Other costs	Total project costs	Less: Participation by entity	Costs claimed for reimbursement

The Notes to Financial Schedules are an integral part of this schedule.



MONTANA DEPARTMENT OF TRANSPORTATION NOTES TO FINANCIAL SCHEDULES

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The schedules of the pipeline relocation portion of project costs for Federal Highway Projects BRF 4-2(10)45 - Laurel Bridge and BRF 16-1(27)1 - East Bridge-Billings have been prepared in conformity with generally accepted accounting principles. The schedules summarize costs incurred by the various utility companies for relocation of their respective pipelines.

NOTE 2. DESCRIPTION OF PROJECTS

Pipeline Relocation Portion of

Federal Highway Project BRF 4-2(10)45 - Laurel Bridge:

The above-referenced project was performed pursuant to a Utilities Agreement between Exxon Pipeline Company (EPC) and the Montana Department of Transportation (MDOT). The agreement, dated June 8, 1990, covered the relocation of EPC's pipeline as required by the construction of a Federal-Aid Road Project. Project costs were originally estimated to be approximately \$601,000 shared as follows: MDOT - \$487,000 and EPC - \$114,000. Actual costs exceeded the original estimate due to changes in the relocation route and underestimation of construction costs.

Pipeline Relocation Portion of

Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings:

The above-referenced project was performed pursuant to Utilities Agreements and a Facilities Adjustment Agreement between eight utility companies and the Montana Department of Transportation. The agreements, dated on various dates in late 1990 and early 1991, covered the relocation of utility pipelines as required by the construction of a Federal-Aid Road Project. Following is a summary of the estimated costs in the initial agreements with the utilities:

	<u>Total</u>	<u>State</u> <u>Share</u>	<u>Utility</u> <u>Share</u>
Montana Sulphur & Chemical Co.	\$ 36,038	\$ 36,038	\$ -
Lockwood Water Users Association	252,046	215,832	36,214
Conoco Pipe Line Co. (Glacier)	172,393	162,205	10,188
Montana-Dakota Utilities Co. (MDU)	182,335	141,401	40,934
Cenex	308,000	299,561	8,439
Exxon Pipeline Co. (EPC)	453,968	317,778	136,190
Yellowstone Pipe Line Co. (YPLC)	442,338	338,698	103,640
Conoco Pipe Line Co. (Seminoe)	299,393	293,016	6,377
Total project	<u>\$2,146,511</u>	<u>\$ 1,804,529</u>	<u>\$ 341,982</u>

MONTANA DEPARTMENT OF TRANSPORTATION NOTES TO FINANCIAL SCHEDULES (CONTINUED)

NOTE 2. DESCRIPTION OF PROJECTS (CONTINUED)

Actual costs varied significantly from original estimates for the following reasons. First, the congestion in the area of the relocation and its effect on the construction costs could not reasonably have been foreseen when the original estimates were prepared. There were numerous utility crossings to contend with, many of which only became apparent as the work progressed. The second primary reason for the additional cost was the requirement to cross a 60-inch sewer line twice. For environmental reasons, the decision was made to install a temporary sewer bypass (lift station and 16-inch pipeline) around the two 60-inch sewer crossings. Again, the geology under the sewer line could not have been reasonably anticipated; however, it required significant alterations in the construction process.

NOTE 3. SCOPE LIMITATION

A portion of the pipeline relocation associated with the East Bridge-Billings project was performed pursuant to a joint venture agreement between the participating utilities (MDU, Cenex, EPC, YPC and Seminoe). The participating utilities entered into a "Design and Construction Contract" with Willbros Butler Engineers, Inc. (Willbros) whereby Willbros would design the joint utility relocation and act as prime contractor and manage the construction phase of the project. The audit paragraph in the above-referenced contract contained a scope limitation with respect to auditing the "calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs". As a result, the professional service fees charged by Willbros to the joint venture participants (approximately \$374,000) and ultimately claimed by the participants for reimbursement were not subject to audit.

NOTE 4. QUESTIONED COSTS

The pipeline relocation portion of the Federal Highway Projects are subject to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 (Federal Acquisition Standards) of the Code of Federal Regulations. These titles and related regulations prescribe cost principles to follow for determining the allowability of costs claimed for reimbursement. The accompanying schedule of the pipeline relocation portion of project costs for the East Bridge-Billings project includes approximately \$467,000 of costs questioned for noncompliance with the above-cited federal regulations.

MONTANA DEPARTMENT OF TRANSPORTATION NOTES TO FINANCIAL SCHEDULES (CONTINUED)

NOTE 4. QUESTIONED COSTS (CONTINUED)

The ultimate allowability of the questioned costs will be determined by the appropriate federal and state regulatory agencies. The questioned costs are considered to be a material uncertainty with respect to the pipeline relocation portion of the East Bridge-Billings project costs.





INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE BASED ON AN AUDIT OF SCHEDULES OF THE PIPELINE RELOCATION PORTION OF PROJECT COSTS FOR FEDERAL HIGHWAY PROJECTS IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the State of Montana
Department of Transportation and
Office of the Legislative Auditor

Federal Highway Project BRF 4-2(10)45 - Laurel Bridge

We have audited the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 4-2(10)45 - Laurel Bridge and have issued our report thereon dated November 30, 1993.

We conducted our audit in accordance with generally accepted auditing standards and <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule is free of material misstatement.

Compliance with laws, regulations, and contracts applicable to the above-referenced project is the responsibility of the Montana Department of Transportation (Department) and the utility participating in the pipeline relocation project. As part of obtaining reasonable assurance about whether the financial schedule is free of material misstatement, we performed tests of the Department's and utility's compliance with certain provisions of laws, regulations and contracts. However, the objective or our audit of the financial schedules was not to provide an opinion on overall compliance with such provisions. Accordingly, we do not express such an opinion.

The results of our tests indicate that, with respect to the items tested, Exxon Pipeline Company and the Montana Department of Transportation complied, in all material respects, with the provisions referred to in the preceding paragraph. With respect to items not tested, nothing came to our attention that caused us to believe that these entities had not complied, in all material respects, with those provisions.

We noted certain immaterial instances of noncompliance that we have included on the accompanying schedule of findings and questioned costs.

Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings

We were engaged to audit the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings, and we have issued our report thereon dated November 30, 1993. We disclaimed an opinion on the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings.

We were unable to audit the percentage(s) used as markup(s) or multiplier(s) applied to labor costs charged by the prime contractor, Willbros Butler Engineers, Inc., on that portion of the East Bridge-Billings project performed as a joint venture by Montana-Dakota Utilities Co., Cenex, Exxon Pipeline Company, Yellowstone Pipeline Company, and Conoco Pipe Line Company.

Compliance with laws, regulations, and contracts applicable to the above-referenced project is the responsibility of the Montana Department of Transportation (Department) and the utilities participating in the pipeline relocation project. As part of obtaining reasonable assurance about whether the financial schedule is free of material misstatement, we performed tests of the Department's and utilities' compliance with certain provisions of laws, regulations and contracts. However, the objective or our audit of the financial schedule was not to provide an opinion on overall compliance with such provisions. Accordingly, we do not express such an opinion.

Material instances of noncompliance consist of failures to follow requirements, or violations of prohibitions, contained in statutes, regulations, or contracts, that cause us to conclude that the aggregation of the misstatements resulting from those failures or violations is material to the schedule of the pipeline relocation portion of the East Bridge-Billings project costs. The results of our tests of compliance disclosed instances of noncompliance described in the accompanying schedule of findings and questioned costs that may be material to the above-referenced schedule.

We considered these instances of noncompliance in forming our opinion on whether the schedule of the pipeline relocation portion of project costs for the East Bridge-Billings Federal Highway Project is presented fairly, in all material respects, in conformity with generally accepted accounting principles, and this report does not affect our report dated November 30, 1993 on that financial schedule.

The results of our tests of compliance, as described in the schedule of findings and questioned costs, indicate that, with respect to the items tested, the entities listed below did not comply, in all material respects, with the provisions referred to in the third paragraph of this

report. The extent of noncompliance noted in our testing indicates that, with respect to the items not tested, there is more than a relatively low risk that the entities listed below had not complied with the provisions referred to in the third paragraph of this report.

Lockwood Water Users Association - East Bridge-Billings Conoco Pipe Line Company (Glacier) - East Bridge-Billings Montana-Dakota Utilities Co. - East Bridge-Billings Cenex - East Bridge-Billings Exxon Pipeline Company - East Bridge-Billings Yellowstone Pipe Line Company - East Bridge-Billings Conoco Pipe Line Company (Seminoe) - East Bridge-Billings Montana Department of Transportation

This report is intended for the information of the Montana Department of Transportation, the State of Montana Office of the Legislative Auditor, the Federal Highways Administration and the participating utilities. However, this report is a matter of public record and its distribution is not limited.

(Inderson) Zur Muchlen € Co., P.C. Helena, Montana

November 30, 1993





INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL STRUCTURE BASED ON AN AUDIT OF SCHEDULES OF THE PIPELINE RELOCATION PORTION OF PROJECT COSTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the State of Montana
Department of Transportation and
Office of the Legislative Auditor

We have audited the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 4-2(10)45 - Laurel Bridge and have issued our report thereon dated November 30, 1993.

We conducted our audit of the Laurel Bridge project in accordance with generally accepted auditing standards and <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedules are free of material misstatement.

We were engaged to audit the accompanying schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 16-1(27)1 - East Bridge Billings, and we have issued our report thereon dated November 30, 1993. We disclaimed an opinion on the schedule because we were unable to audit the base rates and percentage(s) used as markup(s) or multiplier(s) applied to labor costs charged by the prime contractor, Willbros Butler Engineers, Inc., on that portion of the East Bridge-Billings project performed as a joint venture by Montana-Dakota Utilities Co., Cenex, Exxon Pipeline Company, Yellowstone Pipeline Company, and Conoco Pipe Line Company.

In planning and performing our audit of the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 4-2(10)45 - Laurel Bridge, and our work on the schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings, we considered the internal control structure of the various utility companies in order to determine our auditing procedures for the purpose of reporting on the schedules and not to provide assurance on the respective internal control structures.

The managements of the Montana Department of Transportation and the various utilities are responsible for establishing and maintaining an internal control structure. In fulfilling this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of internal control structure policies and procedures. The objectives of an internal control structure are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial schedules in accordance with generally accepted accounting principles. Because of inherent limitations in any internal control structure, errors or irregularities may nevertheless occur and not be detected. Also, projection of any evaluation of the structure to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of the policies and procedures may deteriorate.

For the purpose of this report, we have classified the significant internal control structure policies and procedures in the following categories: approval of costs charged to the projects, and compliance with Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations.

We noted the following matter involving the internal control structure and its operation at the Montana Department of Transportation that we consider to be a reportable condition under standards established by the American Institute of Certified Public Accountants. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control structure that, in our judgment, could adversely affect the Department's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial schedules.

MONTANA DEPARTMENT OF TRANSPORTATION

Condition No. 1:

The costs claimed for reimbursement on the invoices submitted by the utility companies to the Montana Department of Transportation (MDOT) were not consistently supported by adequate documentation. The documentation was not organized in a manner to easily determine that all required information was presented in the invoice packet.

Criteria:

Costs claimed for reimbursement should be supported by documentation demonstrating the relationship between the costs claimed and the project.

Cause:

The MDOT does not require detailed support for costs claimed on interim or "progress" billings. The MDOT relies on "on-site" audits to verify costs claimed on "final" billings for a utility relocation project.

Effect:

The allowability of some costs claimed for reimbursement (and paid by the MDOT) could not be determined because the documentation was inadequate or not present in the invoice packet submitted to the MDOT. An effective cost audit could not be performed without obtaining significant additional information from the utility companies.

Recommendation:

The MDOT should work with the utility companies to establish documentation guidelines for costs claimed for reimbursement. The guidelines should specifically describe the minimum documentation criteria. They should emphasize that cost claims not meeting the documentation criteria will not be processed for payment.

Response:

See the letter following this report.

A material weakness is a reportable condition in which the design or operation of one or more of the internal control structure elements does not reduce to a relatively low level the risk that errors or irregularities in amounts that would be material in relation to the schedules of the pipeline relocation portion of project costs being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

Our consideration of the internal control structure would not necessarily disclose all matters in the internal control structure that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, we noted the following reportable conditions that we believe to be material weaknesses.

MONTANA DEPARTMENT OF TRANSPORTATION

Condition No. 2:

The utility companies and related consulting engineering firms did not comply with various procedural requirements for a utilities relocation project as outlined by the Montana Department of Transportation (MDOT). The utility companies also did not comply with the "cost principles" referenced in the Federal Aid Highway Program Manual, 6-6-3-1.

Criteria:

Titles 23 (included in the Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations prescribe procedures and cost principles for utility relocation projects.

Cause:

The methods and means used by the MDOT to communicate the requirements of the applicable regulations are not adequately designed to assure the utilities understand the importance of complying with the requirements.

Effect:

Some of the utilities contracted with consultants prior to obtaining appropriate approval from the MDOT. Some of the utilities started work on the project before receiving authorization to proceed. Some of the utilities incurred costs prior to receiving appropriate authorization to proceed. Most of the utilities claimed costs for reimbursement that did not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

The MDOT should evaluate the methods and means currently used to communicate the requirements of a utilities relocation project to participating utilities to determine whether improvements can be made. Possible improvements might include (but are not limited to) the following: 1) expanding the reference to the applicable regulations in the Utilities Agreement to include a general description of their content; 2) specifically stating in the Utilities Agreement that reimbursement for claimed costs is dependent on compliance with all applicable provisions of laws and regulations; and 3) incorporating the current "packet" given to participants as an addendum to the Utilities Agreement.

Response:

See the letter following this report.

Condition No. 3:

The "Facilities Adjustment Agreement" between the MDOT and Lockwood Water Users Association (LWUA) did not cite federal regulations governing the procedural aspects of the relocation or the applicable cost principles.

Criteria:

Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations contain guidance concerning procedures and cost principles for a utility relocation project.

Cause:

The agreement with LWUA was not a "standard" agreement, and the appropriate cites to laws and regulations were not included.

Effect:

LWUA incurred costs for a consulting engineer without first obtaining approval from the Federal Highway Administration. (See accompanying Schedule of Findings and Questioned Costs.)

Recommendation:

The MDOT should review and, if necessary, revise its contract preparation procedures to ensure contracts contain references to the appropriate regulations. A one-page "checklist" of critical items might be developed and used when non-standard contracts are prepared.

Response:

See the letter following this report.

Condition No. 4:

The Montana Department of Transportation (MDOT) did not adequately follow up and resolve "critical issues" (identified by its own audit division) related to the "Design and Construction Contract" between the Joint Venture participants and Willbros Butler Engineers, Inc.

Criteria:

The MDOT is primarily responsible for ensuring that all contracts related to a utility relocation project funded with federal dollars are in compliance with all applicable laws and regulations.

Cause:

Project administration was transferred from the Division to the District Engineer before the details of the related contracts had been resolved. Time constraints and concern for project delays also were factors in not resolving the critical issues identified in the MDOT's internal review process. A determination was made to resolve the remaining issues at "final audit".

Effect:

Access to accounting records necessary to adequately audit project costs was denied. Significant "questioned costs" were incurred due, in part, to the way the contract compensation was structured.

Recommendation:

Internal procedures should be reviewed and revised as necessary to ensure that critical issues identified during contract reviews performed by the audit division are resolved before significant costs are incurred on the project.

Response:

See the letter following this report.

LOCKWOOD WATER USERS ASSOCIATION

Condition No. 5:

Association personnel did not monitor costs incurred under the engineering contract; accordingly, the "not-to-exceed" cap was exceeded and the contract was not amended to authorize the additional expenditures.

Criteria:

The contract entered into with the consulting engineer contained a "not-to-exceed" amount that could not be changed except by contract amendment. Title 23 of the Code of Federal Regulations Part 172.9(c)(3) also requires that the maximum amount payable "shall not be exceeded unless adjusted by a contract modification".

Cause:

Association personnel regularly communicated with the engineering firm as the work progressed; however, procedures were not in place to monitor costs incurred on the project.

Effect:

Costs claimed for reimbursement do not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

Association personnel should carefully monitor engineering costs incurred to ensure they do not exceed the "cap" unless a contract modification is approved.

Response:

Agree. LWUA did not monitor actual costs compared to the contract to ensure the "not-to-exceed" cap was not exceeded. With regard to the provisions of CFR 172.9(c)(3); however, LWUA was never supplied with the "Code of Federal Regulations" before or during the utility relocation project. Accordingly, that aspect of the "criteria" cited above was not known to LWUA personnel.

CONOCO PIPE LINE COMPANY (GLACIER)

Condition No. 6:

Conoco personnel responsible for contract administration did not follow the "cost principles" that applied to the Utilities Agreement.

Criteria:

Utility relocation projects are subject to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations which prescribe applicable "cost principles".

Cause:

Conoco personnel did not review the specific federal regulations cited in the Utilities Agreement.

Effect:

Costs were incurred and charged to the project that did not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

Conoco personnel should be aware of the specific federal regulations that are applicable for utility relocation projects.

Response:

We were never made aware of the provisions of Titles 23 and 48 of the Code of Federal Regulations. We have no record showing we received these documents.

Condition No. 7:

Conoco's internal procedures for assuring all costs charged to the project were actually incurred on the project were inadequate. Cost records maintained by the accounting department and engineering departments were not reviewed and reconciled.

Criteria:

Costs charged to a utility relocation project must meet the "allowability" criteria of the applicable cost principles of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations.

Cause:

Conoco is not involved in many projects that are reimbursed by third parties; accordingly, the accounting procedures for such projects are not well-defined.

Effect:

The project was charged for costs that were not incurred on the project.

Recommendation:

Project cost summaries from accounting and engineering should be periodically reconciled to ensure costs charged the project per the accounting records are appropriate.

Response:

There were some mistakes in tracking Conoco salaries. However, cost records maintained by the accounting department and engineering departments were reviewed and reconciled.

MONTANA-DAKOTA UTILITIES CO.

Condition No. 8:

MDU personnel responsible for contract administration did not follow the "cost principles" that applied to the Utilities Agreement.

Criteria:

Utility relocation projects are subject to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations which prescribe applicable "cost principles".

Cause:

MDU personnel did not review the specific federal regulations cited in the Utilities Agreement.

Effect:

Costs were incurred and charged to the project that did not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

MDU personnel should be aware of the specific federal regulations that are applicable for utility relocation projects.

Response:

See the letter following this report.

CENEX

Condition No. 9:

Cenex personnel responsible for contract administration did not follow the "cost principles" that applied to the Utilities Agreement.

Criteria:

Utility relocation projects are subject to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations which prescribe applicable "cost principles".

Cause:

Cenex personnel did not review the specific federal regulations cited in the Utilities Agreement.

Effect:

Costs were incurred and charged to the project that did not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

Cenex personnel should be aware of the specific federal regulations that are applicable for utility relocation projects.

Response:

Cenex agrees that this condition existed inasmuch as our personnel did not thoroughly review all of the applicable provisions of Titles 23 and 48 of the Code of Federal Regulations. It was our belief that our prime contractor, Willbros Butler Engineers, Inc., would properly prepare our documentation to satisfy all Federal requirements on this project.

EXXON PIPELINE COMPANY

Condition No. 10:

EPC personnel responsible for contract administration did not follow the "cost principles" that applied to the Utilities Agreement.

Criteria:

Utility relocation projects are subject to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations which prescribe applicable "cost principles".

Cause:

EPC personnel did not review the specific federal regulations cited in the Utilities Agreement.

Effect:

Costs were incurred and charged to the project that did not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

EPC personnel should be aware of the specific federal regulations that are applicable for utility relocation projects.

Response:

We agree. We did not have copies of the regulations cited in the Utilities Agreement. In future contracts with state agencies we will request their assistance in obtaining copies of the applicable regulations.

YELLOWSTONE PIPE LINE COMPANY

Condition No. 11:

YPLC personnel responsible for contract administration did not follow the "cost principles" that applied to the Utilities Agreement.

Criteria:

Utility relocation projects are subject to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations which prescribe applicable "cost principles".

Cause:

YPLC personnel did not review the specific federal regulations cited in the Utilities Agreement.

Effect:

Costs were incurred and charged to the project that did not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

YPLC personnel should be aware of the specific federal regulations that are applicable for utility relocation projects.

Response:

We were never made aware of the provisions of Titles 23 and 48 of the Code of Federal Regulations. We have no records showing we received these documents.

CONOCO PIPE LINE COMPANY (SEMINOE)

Condition No. 12:

CPLC personnel responsible for contract administration did not follow the "cost principles" that applied to the Utilities Agreement.

Criteria:

Utility relocation projects are subject to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations which prescribe applicable "cost principles".

Cause:

CPLC personnel did not review the specific federal regulations cited in the Utilities Agreement.

Effect:

Costs were incurred and charged to the project that did not meet the "allowability" criteria of the applicable cost principles.

Recommendation:

CPLC personnel should be aware of the specific federal regulations that are applicable for utility relocation projects.

Response:

We were never made aware of the provisions of Titles 23 and 48 of the Code of Federal Regulations. We have no records showing we received these documents.

WILLBROS BUTLER ENGINEERS, INC.

Condition No. 13:

During the initial contract negotiations with the Joint Venture participants, Willbros personnel were not made aware that federal dollars were involved in the project.

Criteria:

Contracts executed pursuant to a Utilities Agreement should conform to the provisions of Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations.

Cause:

Conoco acted as the "lead" company for the joint venture. During the bidding process for the design and construction management contract, Conoco did not clearly communicate to Willbros that federal dollars were involved in the project.

Effect:

The contract was structured as a "commercial" contract in which Willbros limited access to certain cost information. The method used to compute compensation followed Willbros' commercial model rather than their government model.

Recommendation:

Willbros personnel should develop a clear understanding of the ultimate source of compensation on the contract prior to its execution.

Response:

Willbros Butler believes the recommendation to be informative but does not respond to the actual problem. While Willbros Butler may have been aware of the federal funding, we had no knowledge of the form of agreements between the State and the utilities nor the cost reimbursement requirements of the Utility Agreements. The form of the Joint Venture agreement was proposed by the Joint Venture. Given the contractual hierarchy, the Joint Venture has the responsibility of passing through any pertinent obligations from their client, the Montana Department of Transportation, to Willbros Butler.

We considered these material weaknesses in forming our opinion on whether the schedule of the pipeline relocation portion of project costs for the East Bridge-Billings Federal Highway Project is presented fairly, in all material respects, in conformity with generally accepted accounting principles, and this report does not affect our report dated November 30, 1993 on that financial schedule.

This report is intended for the information of the Montana Department of Transportation, the State of Montana Office of the Legislative Auditor, the Federal Highway Administration and the participating utilities. However, this report is a matter of public record and its distribution is not limited.

Anderson Zur Muchlen & Co., A.C.
Helena, Montana
November 30, 1993



MONTANA DEPARTMENT OF TRANSPORTATION SCHEDULE OF FINDINGS AND QUESTIONED COSTS

Questioned Costs

Federal Highway Project BRF 4-2(10)45 - Laurel Bridge

EXXON PIPELINE COMPANY (EPC):

Condition No. 14:

The contract between EPC and State-Line Contractors, Inc. does not cite Titles 23 (included in Federal Aid Highway Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations (CFR) in the "compliance with laws" paragraph.

Criteria:

23 CFR 172.9 requires all documents related to the project to cite the applicable "cost principles".

Cause:

EPC personnel were not aware of the requirement.

Effect:

Costs may be incurred and claimed for reimbursement that are not allowable under the applicable cost principles.

Recommendation:

Contract language should conform to the Federal regulations.

Response:

We agree. We did not have copies of the regulations cited in the Utilities Agreement, so we were not aware of the requirement. In future contracts with state agencies we will request their assistance in obtaining copies of the applicable regulations.

Condition No. 15:

The "audit paragraph" in the contract between EPC and State-Line Contractors, Inc. did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreement requires all cost records to be subject to inspection at any time by representatives of the Montana Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

EPC personnel were not aware of the requirement.

Effect:

Access to cost records by the MDOT and the FHWA could be denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

If the state agency desired to audit the contract with State Line, EPC would have made arrangements to accommodate this request. In future contracts with state and federal agencies, EPC will ensure that a specific reference is included to allow audits by these agencies.

Condition No. 16:

The original estimate and the final bill submitted by EPC were not consistent in form.

Criteria:

The State of Montana Department of Highways "Utilities Manual" prescribes an estimate form but allows alternative forms to be used provided the format of the estimate and final billings are consistent to allow for comparisons.

Cause:

EPC personnel were not aware of the requirement.

Questioned ___Costs

Effect:

Inconsistencies between the format of the estimate and final bill make comparisons between the two documents difficult and increase the costs of performing compliance reviews.

Recommendation:

EPC should comply with the guidelines for estimates and bills provided by the MDOT.

Response:

EPC has a standard form used to prepare the original estimate. The accounting department uses a separate form for preparing invoices but costs are broken down with enough detail to compare with the original estimate.

Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings

LOCKWOOD WATER USERS ASSOCIATION (LWUA):

Condition No. 17:

Contracts for engineering and construction services entered into by LWUA pursuant to the "Facilities Adjustment Agreement" did not include appropriate references to "cost principles".

Criteria:

Title 23 of the Code of Federal Regulations (CFR) Part 172.9 requires all contractual documents to cite the cost principles in 48 CFR 31.

Cause:

LWUA personnel were not aware of the requirement.

Effect:

Costs claimed for reimbursement may include costs that are not allowable under the applicable cost principles.

Recommendation:

Contract language should conform to the provisions of 23 CFR 172.9.

Response:

MDOT did not supply LWUA with a copy of the "Code of Federal Regulations"; therefore, it would be assumed that no language conforming to those provisions was included in the contracts.

Condition No. 18:

Contracts for engineering and construction services entered into by LWUA pursuant to the "Facilities Adjustment Agreement" did not include appropriate language to ensure access to cost records by representatives of the Federal and state governments.

Criteria:

Paragraph 8 of the "Facilities Adjustment Agreement" states that all cost records "will be subject to inspection by representatives of the Department".

Cause:

LWUA personnel were not aware of the requirement.

Effect:

The representatives of Federal and state agencies may not be able to adequately audit costs incurred and claimed for reimbursement under the "Facilities Adjustment Agreement".

Recommendation:

Contract language should conform to the provisions of the "Facilities Adjustment Agreement".

Response:

The contract for engineering and construction services did not contain the appropriate language. However, all costs incurred by LWUA were well documented and copies of all invoices and work associated with the relocation project were supplied along with the pay requests sent to the MDOT for approval and payment.

Condition No. 19:

Costs claimed by LWUA for reimbursement include costs paid to a consulting engineer. LWUA did not receive approval from the Federal Highway Administration (FHWA) before hiring a consultant.

Criteria:

Title 23 of the Code of Federal Regulations Part 172.5 (a) requires the contracting agency to receive approval from the FHWA before hiring a consulting engineering firm.

Cause:

LWUA personnel were not aware of the requirement.

Effect:

Costs claimed for reimbursement do not meet the "allowability" requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because the costs were incurred in violation of other federal regulations.

Recommendation:

None. LWUA could not be expected to know that prior approval to hire a consulting engineer was required under the contract.

Response:

We disagree. We received "Authorization to Proceed" with preliminary engineering on April 20, 1989. After that date MDOT was informed the Morrison-Maierle/CSSA, Inc. (MM/CSSA) would be the consulting engineer for LWUA. LWUA entered into the "Agreement for Professional Engineering" with MM/CSSA on August 9, 1989. At no time before or during the project did the MDOT disapprove of MM/CSSA, nor did the MDOT report that MM/CSSA was not approved by the FHWA. Again, LWUA was not supplied with the "Code of Federal Regulations" by MDOT, but all cost requests from LWUA to the MDOT were requested in accordance with the Agreement and were allowable under that Agreement.

Condition No. 20:

Costs claimed by LWUA for reimbursement include engineering costs incurred in excess of the "not to exceed" amount in the applicable contract. The contract was not modified to increase the "not to exceed" amount.

Criteria:

Title 23 of the Code of Federal Regulations Part 172.9(c)(1) requires that the maximum amount payable "shall not be exceeded unless adjusted by a contract modification".

Cause:

LWUA did not have control procedures in place to monitor costs incurred in comparison to the contract "cap".

Effect:

Costs claimed for reimbursement do not meet the "allowability" requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because the costs were incurred in violation of other federal regulations.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the guidelines of OMB Circular A-87.

Response:

We partially agree. We acknowledge the "not-to-exceed" amount in the contract related to the construction phase was exceeded. However, LWUA was not supplied with the "Code of Federal Regulations" by the MDOT; accordingly, we were not aware that costs in excess of the "not-to-exceed" were unallowable.

Subtotal

6,300 80,610

CONOCO PIPE LINE COMPANY (GLACIER) (CPLC):

Condition No. 21:

The original estimate and the final bill submitted by CPLC were not consistent in form.

Criteria:

The State of Montana Department of Highways "Utilities Manual" prescribes an estimate form but allows alternative forms to be used provided the format of the estimate and final billings are consistent to allow for comparisons.

Cause:

CPLC personnel were not aware of the requirement.

Effect:

Inconsistencies between the format of the estimate and final bill make comparisons between the two documents difficult and increase the costs of performing compliance reviews.

Recommendation:

CPLC personnel should prepare estimates and bills in accordance with guidelines provided by the MDOT.

Response:

The original estimate was simply shown in more detail than the final bill. The categories are consistent. We were never made aware of the provisions of the State of Montana Department of Highways "Utilities Manual". We have no records showing we received this document.

Condition No. 22:

The contract between CPLC and Barnard Construction Company, Inc. does not cite Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations (CFR) in the "compliance with laws" paragraph.

Criteria:

23 CFR 172.9 requires all documents related to the project to cite the applicable "cost principles".

Cause:

CPLC personnel were not aware of the requirement.

Effect:

Costs may be incurred and claimed for reimbursement that are not allowable under the applicable cost principles.

Questioned ___Costs

Recommendation:

CPLC personnel should read and comply with the regulations cited in the Utilities Agreement.

Response:

We were never made aware of the provisions of Titles 23 and 48 of the Code of Federal Regulations. We have no records showing we received these documents. The contract between CPLC and Barnard Construction Company, Inc. was submitted to the MDOT for their review. No revisions to the contract were requested on behalf of the MDOT.

Condition No. 23:

The "audit paragraph" in the contract between CPLC and Barnard Construction Company, Inc. did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreement requires all cost records to be subject to inspection at any time by representatives of the Montana Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

CPLC personnel were not aware of the requirement..

Effect:

Access to cost records by the MDOT and the FHWA could be denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

The contract between CPLC and Barnard Construction Company, Inc. was submitted to the MDOT for their review. No revisions to the contract were requested on behalf of the MDOT.

Condition No. 24:

Costs claimed by CPLC for reimbursement included direct labor charges for an employee for the period from April 1, 1991 through April 30, 1992. The contractor did not mobilize to the project until late April 1991 and did not begin construction until May 1991. The employee was reassigned to another job after April 1991.

Criteria:

Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" requires a beneficial relationship to exist between the cost claimed and the cost objective (project).

Cause:

CPLC's internal controls for reviewing costs charged to reimbursable projects were not adequately designed to discover incorrect costs charged to the project. Time reports are not required for persons assigned on a full-time basis to a specific project.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

There is a significant amount of work which is required prior to contractor mobilization. This includes, but is not limited to surveying, utility locations, preconstruction safety meetings, and reading project specifications. The charges for April 1991, \$3,354, are correct.

Another employee performed work on the project; however, his salary was not charged. The additional salary to be charged is \$12,715.

Condition No. 25:

Costs claimed by CPLC for reimbursement included 100% of the salary of an employee for the period from April 1991 through November 1991. Available time records for the period from April 1991 through August 1991 indicate the employee did not spend 100% of his work time on the project. There were no time records available for costs claimed after August 1991.

Criteria:

Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" requires a beneficial relationship to exist between the cost claimed and the cost objective (project). It also requires that costs be supported by detailed documentation.

Cause:

CPLC's internal controls for adjusting salary costs charged to a reimbursable project were not adequate to ensure only actual costs were charged.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

We do not agree. The costs claimed are for the period of August 1991 through November 1991 when the employee was assigned exclusively to the project. We do claim additional costs of \$9,092 for 588 hours worked on the project for the period of April 1991 through July 1991.

11,201

Condition No. 26:

Costs claimed by CPLC for reimbursement included travel and living expenses for two employees for April 1991. However, the contractor did not mobilize to the job until April 25, and work did not begin until May 10.

Criteria:

Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" requires a beneficial relationship to exist between the cost claimed and the cost objective (project).

Cause:

CPLC believes the costs incurred are appropriate costs for the project.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

We do not agree. There is a significant amount of work which is required prior to contractor mobilization. This includes, but is not limited to permitting, surveying, utility locations, preconstruction safety meetings, reading project specifications, and miscellaneous project administration activities. The charges for April 1991 are correct.

3,045

Condition No. 27:

Costs claimed by CPLC for reimbursement included labor benefit costs based on direct labor dollars charged to the project. As noted above, direct labor dollars were overstated. As a result, the labor benefit costs are also overstated.

Criteria:

OMB Circular A-87 allows employee benefit costs only to the extent that total compensation for personnel is reasonable.

Cause:

CPLC's accounting procedures requiring that benefit costs be adjusted based on the applicable burden rate were not applied to this project.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

We do not agree that costs were overcharged. We did not apply our employee benefits (42.8%) and overhead rate (18.81% applied to direct company labor) correctly. Consequently we are claiming an additional \$4,424 for additional employee benefits and overhead on direct company labor.

10,619

Condition No. 28:

Costs claimed by CPLC for reimbursement included overhead costs based on total costs (other than automotive) charged to the project. As noted above, direct labor dollars, labor benefits, and certain travel and living expenses were overstated. As a result, the overhead costs are also overstated.

Criteria:

OMB Circular A-87 allows overhead costs provided the methods used to allocate such costs provides an equitable result in consideration of the relative benefits derived.

Cause:

CPLC's internal controls for reviewing costs charged to reimbursable projects were not adequate to ensure that only appropriate costs were charged.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

We partially agree with this condition. We have computed an overhead credit of \$374. However, we were never made aware of the provisions of OMB Circular A-87. We have no records showing we received this document.

Subtotal

7,142 66,527

MONTANA-DAKOTA UTILITIES CO. (MDU):

Condition No. 29:

Costs claimed by MDU for reimbursement included costs incurred prior to receipt of the "authorization to proceed with final engineering" from the Montana Department of Transportation.

Criteria:

The Utilities Agreement states in paragraph 13.(a) that "no actual work is to be performed under this agreement until written authority to proceed is received..."

Cause:

MDU considered the costs appropriate preliminary engineering costs chargeable to the project.

Effect:

Costs claimed for reimbursement are overstated by the amount of costs incurred before receiving written authorization to proceed.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the requirements of the Utilities Agreement.

Response:

Costs incurred prior to "Authorization to proceed with final engineering" were for preliminary engineering. On a project of this size and complexity, a significant amount of preliminary engineering is needed just to formulate an engineering plan and cost estimate.

929

Condition No. 30:

Costs claimed by MDU for reimbursement included overhead charges for general and administrative costs (GA). The GA cost pool included projected costs for the BETA (Bonus Earned Through Achievement) program. The BETA program is a form of profit-sharing.

Criteria:

Profit-sharing plans are not listed as allowable costs in Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments".

Cause:

MDU personnel do not agree the BETA costs do not meet the "allowability" criteria of OMB Circular A-87.

Effect:

Costs claimed for reimbursement are overstated because they include costs not allowed by OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the requirements of OMB Circular A-87.

Response:

The BETA program is <u>not</u> a form of profit sharing. It is what is commonly referred to as a gain sharing plan. Gain sharing is a way for employers to increase productivity by rewarding employees for improved performance tied to specific activities. In our plan, it is possible to have a highly profitable year, yet realize no payout because of failure to achieve specific goals. That would not happen in a profit sharing plan. BETA does have a financial threshold that must be met, but that threshold is only to assure that in the unlikely event goals are achieved during a poor year that a payout does not occur.

Condition No. 31:

Costs claimed by MDU for reimbursement included overhead costs for engineering and supervision (ES) and for general and administrative expenses (GA). The overhead rates were applied to all costs incurred on the project.

Criteria:

OMB Circular A-87 allows overhead costs provided the methods used to allocate such costs provide an equitable result in consideration of the relative benefits derived.

Cause:

MDU accounted for the project consistent with other reimbursable projects where MDU performed the engineering and construction management functions. MDU does not agree that overhead costs for this project should be accounted for differently.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87. Engineering services and contract management were contracted to a third party; accordingly, the project did not receive a benefit equal to the overhead costs charged.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

This project required a considerable amount of supervision by the Gas Superintendent and the Construction Supervisor. Certainly projects of this size carry a certain amount of overhead costs and 8.5% does not appear unreasonable, especially compared to the percentages of the other companies involved.

21,233

Condition No. 32:

The "audit paragraph" in the contract between Willbros Butler Engineers, Inc. and the Joint Venture participants (one of which was MDU) contains a "scope limitation" with respect to auditing "(a) costs of work performed and paid on a lump-sum basis and (b) calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs." In addition, the paragraph did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreements with the Joint Venture participants require all cost records to be subject to inspection at any time by representatives of the Montana Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

MDU personnel did not adequately review the contract for compliance with the provisions of the Utilities Agreement.

Effect:

Audit scope was limited and professional services costs charged by Willbros and claimed for reimbursement could not be audited. Access to cost records by the MDOT and the FHWA was denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

The contract between the Joint Venture participants and Willbros Butler was widely and thoroughly studied by the legal staffs of all the Joint Venture participants, and the MDOT and FHWA personnel. All parties made a good faith effort to comply with all applicable State and Federal laws. In particular, the audit paragraph was specifically approved by all parties. If MDU made errors in this contract, at the very least it may be said that others shared in the responsibility for these errors.

Condition No. 33:

Pursuant to the terms of the "Design and Construction Contract", as amended, between Willbros Butler Engineers, Inc. (Willbros) and the Joint Venture participants (of which MDU was one), part of the compensation to Willbros was in the form of a "risk fee". The contract amendment states: "This fee is estimated to be \$150,000. However, the actual charge will be based on the value of the radiographic inspection and construction subcontracts and, in any event, will not exceed ten percent (10%) of the value of the radiographic inspection and construction subcontracts."

Criteria:

Title 23 of the Code of Federal Regulations (CFR), part 172.9 states, in part, that "compensation based on cost plus a percentage of cost or percentage of construction costs shall not be used."

Cause:

MDU personnel were not aware that Title 23 of the CFR prohibited compensation based on a percentage of construction costs.

Effect:

The contract language is in violation of the applicable federal regulations. The resulting "risk fee" costs claimed for reimbursement do not meet the requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because they are in violation of other federal regulations.

Recommendation:

Contract language should conform to federal regulations so costs claimed for reimbursement on the project are allowable.

Response:

The contract between the Joint Venture participants and Willbros Butler was widely and thoroughly studied by the legal staffs of all the Joint Venture participants, and the MDOT and FHWA personnel. All parties made a good faith effort to comply with all applicable State and Federal laws. In particular, the Risk Fee was specifically approved by all parties. If MDU made errors in this contract, at the very least it may be said that others shared in the responsibility for these errors.

30,434 144,829

CENEX:

Condition No. 34:

The original estimate and the final bill submitted by Cenex were not consistent in form.

Criteria:

The State of Montana Department of Highways "Utilities Manual" prescribes an estimate form for utility relocation projects but allows alternative forms to be used provided the format of the estimate and final billings are consistent to allow for comparisons.

Cause:

Cenex personnel were not aware of the requirement.

Effect:

Inconsistencies between the format of the estimate and final bill make comparisons between the two documents difficult and increase the costs of performing compliance reviews.

Recommendation:

Prepare estimates of costs and final billings of incurred costs in a consistent format.

Response:

Cenex agrees that this condition is factual. Efforts will be made to remedy this condition on any future utility relocation projects.

Condition No. 35:

Costs claimed by Cenex for reimbursement included costs for materials purchased by the prime contractor (as agent for Cenex) that were not used on the project and given to Cenex when the project was completed.

Criteria:

Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" requires that direct costs be specifically identified with, and benefit, a cost objective.

Cause:

Cenex personnel thought material costs had been adjusted by Willbros.

Effect:

Costs claimed for reimbursement are overstated because they do not meet the requirements of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the requirements of OMB Circular A-87,

Response:

Cenex agrees with the above stated condition; however, the amount of excess material (assumed to be primarily pipe) would not seem to be unreasonable when one considers that a shortage of available material on a project of this nature would result in very costly work delays.

8,340

Condition No. 36:

The "audit paragraph" in the contract between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which Cenex was one) contains a "scope limitation" with respect to auditing "(a) costs of work performed and paid on a lump-sum basis and (b) calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs." In addition, the paragraph did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreements with the Joint Venture participants require all cost records to be subject to inspection at any time by representatives of the Montana Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

Cenex personnel did not adequately review the contract for compliance with the provisions of the Utilities Agreement.

Effect:

Audit scope was limited and professional services costs charged by Willbros and claimed for reimbursement could not be audited. Access to cost records by the MDOT and the FHWA was denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

Cenex agrees that this condition is factual. We at Cenex are quite disturbed that access was denied to audit records at Willbros Butler Engineers, Inc. and that legal contractual verbiage would even be a necessity for them to allow such an audit. Nonetheless, we at Cenex recognize that it should have been our responsibility to see that the appropriate contract language relative to this issue be included in the agreement between Willbros and the Joint Venture participants.

105,810

Condition No. 37:

Pursuant to the terms of the "Design and Construction Contract", as amended, between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which Cenex was one), part of the compensation to Willbros was in the form of a "risk fee". The contract amendment states: "This fee is estimated to be \$150,000. However, the actual charge will be based on the value of the radiographic inspection and construction subcontracts and, in any event, will not exceed ten percent (10%) of the value of the radiographic inspection and construction subcontracts."

Criteria:

Title 23 of the Code of Federal Regulations (CFR), part 172.9 states, in part, that "compensation based on cost plus a percentage of cost or percentage of construction costs shall not be used."

Cause:

Cenex personnel were not aware that Title 23 of the CFR prohibited compensation based on a percentage of construction costs.

Effect:

The contract language is in violation of the applicable federal regulations. The resulting "risk fee" costs claimed for reimbursement do not meet the requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because they are in violation of other federal regulations.

Recommendation:

Contract language should conform to federal regulations so costs claimed for reimbursement on the project are allowable.

Response:

Cenex disagrees with the finding on this stated condition. It was our understanding as a result of a meeting with representatives from the MDOT, Willbros Butler Engineering, and the Joint Venture participants, that the assessment of a "Risk Fee" would be acceptable to all of the involved parties. As written, the percentage listed in the contract amendment defines the upper limit for compensation, and not the actual compensation itself.

Subtotal

30,897 145,047

EXXON PIPELINE COMPANY (EPC):

Condition No. 38:

Costs claimed by EPC for reimbursement included overhead costs for engineering and supervision and for general and administrative expenses. The overhead rates were applied to all costs incurred on the project.

Criteria:

OMB Circular A-87 allows overhead costs provided the methods used to allocate such costs provide an equitable result in consideration of the relative benefits derived.

Cause:

EPC accounted for this project consistent with other projects where EPC performs the engineering and construction management functions.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87. Engineering services and contract management were contracted to a third party; accordingly, the project did not receive a benefit equal to the overhead costs charged.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

EPC's standard overhead charges are applied to all reimbursable jobs as per established company policy. Wages and salaries for professional and managerial employees are not charged directly to reimbursable projects but can be substantial depending on the complexity of the projects. The overhead markup is applied to recover a portion of this expense, but not 100%.

43,643

Condition No. 39:

The "audit paragraph" in the contract between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which EPC was one) contains a "scope limitation" with respect to auditing "(a) costs of work performed and paid on a lump-sum basis and (b) calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs." In addition, the paragraph did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreements with the Joint Venture participants require all cost records to be subject to inspection at any time by representatives of the Montana Department of Transforation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

EPC personnel did not adequately review the contract to ensure the language was consistent with the Utilities Agreement.

Effect:

Audit scope was limited and professional services costs charged by Willbros and claimed for reimbursement could not be audited. Access to cost records by the MDOT and the FHWA was denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

We agree the contract contained language limiting the audit scope. In the future, EPC will negotiate with contractors to release this information if required by the government agency.

89,427

Condition No. 40:

Pursuant to the terms of the "Design and Construction Contract", as amended, between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which EPC was one), part of the compensation to Willbros was in the form of a "risk fee". The contract amendment states: "This fee is estimated to be \$150,000. However, the actual charge will be based on the value of the radiographic inspection and construction subcontracts and, in any event, will not exceed ten percent (10%) of the value of the radiographic inspection and construction subcontracts."

Criteria:

Title 23 of the Code of Federal Regulations (CFR), part 172.9 states, in part, that "compensation based on cost plus a percentage of cost or percentage of construction costs shall not be used."

Cause:

EPC personnel were not aware that Title 23 of the CFR prohibited compensation based on a percentage of construction costs.

Effect:

The contract language is in violation of the applicable federal regulations. The resulting "risk fee" costs claimed for reimbursement do not meet the requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because they are in violation of other federal regulations.

Recommendation:

Contract language should conform to federal regulations so costs claimed for reimbursement on the project are allowable.

Response:

We do not agree. Shortly after the project for construction was awarded to Willbros Butler Engineers, Inc., a meeting was held between representatives from the MDOT and Willbros. Discussed was the contract amount including the "risk fee" cost. At that time the MDOT was satisfied with Willbros' explanation concerning all bid costs.

Subtotal

28,456 161,526

YELLOWSTONE PIPE LINE COMPANY (YPLC):

Condition No. 41:

Costs claimed by YPLC for reimbursement included costs incurred prior to receipt of the "authorization to proceed with final engineering" from the Montana Department of Transportation.

Criteria:

The Utilities Agreement states in paragraph 13.(a) that "no actual work is to be performed under this agreement until written authority to proceed is received..."

Cause:

YPLC's internal controls for reimbursable projects are not adequately designed to ensure that all costs claimed for reimbursement were "authorized".

Effect:

Costs claimed for reimbursement are overstated by the amount of costs incurred before receiving written authorization to proceed.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the requirements of the Utilities Agreement.

Response:

A significant amount of work was required prior to performing "final engineering". Costs claimed are accurate and are not overstated.

1,493

Condition No. 42:

Costs claimed by YPLC for reimbursement included costs for materials delivered to the prime contractor that were not used on the project and returned to YPLC when the project was completed.

Criteria:

Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" requires that direct costs be specifically identified with, and benefit, a cost objective.

Cause:

YPLC's internal controls for reimbursable projects are not adequately designed to ensure that all costs claimed for reimbursement are appropriate.

Effect:

Costs claimed for reimbursement are overstated because they do not meet the requirements of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the requirements of OMB Circular A-87.

Response:

We agree to a credit for the amount of the returned materials.

3,557

Condition No. 43:

Costs claimed by YPLC for reimbursement included overhead costs for engineering and supervision and for general and administrative expenses. The overhead rates were applied to all costs incurred on the project.

Criteria:

OMB Circular A-87 allows overhead costs provided the methods used to allocate such costs provide an equitable result in consideration of the relative benefits derived.

Cause:

YPLC accounted for this project consistent with other projects where YPLC performs the engineering and construction management functions.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87. Engineering services and contract management were contracted to a third party; accordingly, the project did not receive a benefit equal to the overhead costs charged.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

We do not agree. The overhead rate applied to all costs is for recovering general and administrative expenses (indirect costs) such as accounting, purchasing, payroll and etc.

36,598

Condition No. 44:

The "audit paragraph" in the contract between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which YPLC was one) contains a "scope limitation" with respect to auditing "(a) costs of work performed and paid on a lump-sum basis and (b) calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs." In addition, the paragraph did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreements with the Joint Venture participants require all cost records to be subject to inspection at any time by representatives of the Montana Department of Transforation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

YPLC personnel did not adequately review the contract to ensure the language conformed to the requirements of the Utilities Agreement.

Effect:

Audit scope was limited, and professional services costs charged by Willbros and claimed for reimbursement could not be audited. Access to cost records by the MDOT and the FHWA was denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

The contract between Willbros Butler Engineers, Inc. and the Joint Venture participants was submitted to the MDOT for their review. No revisions to the contract were requested on behalf of the MDOT.

44,682

Condition No. 45:

Pursuant to the terms of the "Design and Construction Contract", as amended, between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which YPLC was one), part of the compensation to Willbros was in the form of a "risk fee". The contract amendment states: "This fee is estimated to be \$150,000. However, the actual charge will be based on the value of the radiographic inspection and construction subcontracts and, in any event, will not exceed ten percent (10%) of the value of the radiographic inspection and construction subcontracts."

Criteria:

Title 23 of the Code of Federal Regulations (CFR), part 172.9 states, in part, that "compensation based on cost plus a percentage of cost or percentage of construction costs shall not be used."

Cause:

YPLC personnel were not aware that Title 23 of the CFR prohibited compensation based on a percentage of construction costs.

Effect:

The contract language is in violation of the applicable federal regulations. The resulting "risk fee" costs claimed for reimbursement do not meet the requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because they are in violation of other federal regulations.

Recommendation:

Contract language should conform to federal regulations so costs claimed for reimbursement on the project are allowable.

Response:

The contract between Willbros Butler Engineers, Inc. and the Joint Venture participants was submitted to the MDOT for their review. No revisions to the contract were requested on behalf of the MDOT. Also, we were never made aware of the provisions of Title 23 of the Code of Federal Regulations. We have no records showing we received this document.

Subtotal

26,147 112,477

CONOCO PIPE LINE COMPANY (SEMINOE):

Condition No. 46:

Costs claimed by Seminoe for reimbursement included costs incurred prior to receipt of the "authorization to proceed with final engineering" from the Montana Department of Transportation.

Criteria:

The Utilities Agreement states in paragraph 13.(a) that "no actual work is to be performed under this agreement until written authority to proceed is received..."

Cause:

Seminoe considered the costs incurred appropriate and chargeable to the project.

Effect:

Costs claimed for reimbursement are overstated by the amount of costs incurred before receiving written authorization to proceed.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the requirements of the Utilities Agreement.

Response:

A significant amount of work was required prior to performing "final engineering". Costs claimed are accurate and are not overstated.

Condition No. 47:

Costs claimed by Seminoe for reimbursement included costs for materials delivered to the prime contractor that were not used on the project and returned to Seminoe when the project was completed.

Criteria:

Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" requires that direct costs be specifically identified with, and benefit, a cost objective.

Cause:

Seminoe's internal controls for reimbursable projects are not adequately designed to ensure that all costs claimed for reimbursement have been incurred on the project.

Effect:

Costs claimed for reimbursement are overstated because they do not meet the requirements of OMB Circular A-87.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the requirements of OMB Circular A-87.

Response:

We agree to a credit for the amount of the returned materials.

2,981

Condition No. 48:

Costs claimed by Seminoe for reimbursement included one-half of the engineering and construction management costs incurred by Willbros Butler Engineering, Inc. and passed on to Conoco (YPLC and Seminoe).

Criteria:

OMB Circular A-87 requires that direct costs be identified specifically with, and benefit a cost objective.

Cause:

For internal accounting purposes, Conoco (the parent company for Conoco Pipe Line Company (Seminoe) and YPLC) wanted to split the Willbros costs equally between the two subsidiary companies.

Effect:

Costs claimed by Seminoe for reimbursement are overstated and do not meet the requirements of OMB Circular A-87. The equal split of costs between YPLC and Seminoe does not reflect an accurate cost-benefit relationship. From inception of the joint venture project until after the construction contract was bid, YPLC had two pipelines in the scope of the project. The 4 inch line was not deleted until after the construction contract was bid. Accordingly, costs incurred in the joint venture arrangement from inception through August 1991 should have been allocated as follows; two-thirds to YPLC and one-third to Seminoe. Because of the different percentage participations by the State of Montana in the two projects, total costs claimed for reimbursement were overstated.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they reflect an appropriate cost-benefit relationship as required by OMB Circular A-87.

Response:

The proposed allocation of costs through August 1991 is inaccurate for the following reasons:

- A 4" pipeline requires significantly less work than an 8" pipeline. Therefore, the 4" YPLC line required less work than the 8" YPLC or 8" Seminoe pipeline.
- Willbros Butler's work is not increased proportionately to the number of pipelines included in the bid. A lump sum engineering and construction management cost would be incurred regardless of the number of pipelines included in the scope of the project.

Condition No. 49:

Costs claimed by Seminoe for reimbursement included overhead costs for engineering and supervision and for general and administrative expenses. The overhead rates were applied to all costs incurred on the project.

Criteria:

OMB Circular A-87 allows overhead costs provided the methods used to allocate such costs provide an equitable result in consideration of the relative benefits derived.

Cause:

Seminoe accounted for this project consistent with other projects where Seminoe performs the engineering and construction management functions.

Effect:

Costs claimed for reimbursement are overstated because they include costs that do not meet the cost principles of OMB Circular A-87. Engineering services and contract management were contracted to a third party; accordingly, the project did not receive a benefit equal to the overhead costs charged.

Recommendation:

Costs claimed for reimbursement should be reviewed to ensure they meet the cost principles of OMB Circular A-87.

Response:

We do not agree. The overhead rate applied to all costs is for recovering general and administrative expenses (indirect costs) such as accounting, payroll, purchasing and etc. In addition, significant costs were incurred reviewing and correcting Willbros' drawings and specifications, responding to numerous Willbros correspondence, and many other project administration activities.

48,093

Condition No. 50:

The "audit paragraph" in the contract between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which Seminoe was one) contains a "scope limitation" with respect to auditing "(a) costs of work performed and paid on a lump-sum basis and (b) calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs." In addition, the paragraph did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreements with the Joint Venture participants require all cost records to be subject to inspection at any time by representatives of the Montana Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

Seminoe personnel did not adequately review the contract to ensure the provisions were consistent with the Utilities Agreement.

Effect:

Audit scope was limited and professional services costs charged by Willbros and claimed for reimbursement could not be audited. Access to cost records by the MDOT and the FHWA was denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

The contract between Willbros Butler Engineers, Inc. and the Joint Venture participants was submitted to the MDOT for their review. No revisions to the contract were requested on behalf of the MDOT. Also, we were never made aware of the provisions of Title 23 of the Code of Federal Regulations. We have no records showing we received this document.

Condition No. 51:

Pursuant to the terms of the "Design and Construction Contract", as amended, between Willbros Butler Engineers, Inc. and the Joint Venture participants (of which Seminoe was one), part of the compensation to Willbros was in the form of a "risk fee". The contract amendment states: "This fee is estimated to be \$150,000. However, the actual charge will be based on the value of the radiographic inspection and construction subcontracts and, in any event, will not exceed ten percent (10%) of the value of the radiographic inspection and construction subcontracts."

Criteria:

Title 23 of the Code of Federal Regulations (CFR), part 172.9 states, in part, that "compensation based on cost plus a percentage of cost or percentage of construction costs shall not be used."

Cause:

Seminoe personnel were not aware that Title 23 of the CFR prohibited compensation based on a percentage of construction costs.

Effect:

The contract language is in violation of the applicable federal regulations. The resulting "risk fee" costs claimed for reimbursement do not meet the requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because they are in violation of other federal regulations.

Recommendation:

Contract language should conform to federal regulations so costs claimed for reimbursement on the project are allowable.

Response:

The contract between Willbros Butler Engineers, Inc. and the Joint Venture participants was submitted to the MDOT for their review. No revisions to the contract were requested on behalf of the MDOT. Also, we were never made aware of the provisions of Title 23 of the Code of Federal Regulations. We have no records showing we received this document.

27,184 130,392

Questioned Costs

WILLBROS BUTLER ENGINEERS, INC. (WILLBROS):

Condition No. 52:

The contract between Willbros and the Joint Venture participants does not cite Title 23 of the Code of Federal Regulations (CFR) in the "compliance with laws" paragraph.

Criteria:

23 CFR 172.9 requires all documents related to the project to cite the applicable "cost principles".

Cause:

Willbros personnel were not aware of the requirement.

Effect:

Costs may be incurred and claimed for reimbursement that are not allowable under the applicable cost principles.

Recommendation:

Contract language should conform to the Federal regulations.

Response:

Willbros Butler agrees with the recommendation; however, action would have had to originate with the Joint Venture participants. Willbros Butler negotiated and executed in good faith an agreement originated by the Joint Venture. The lack of reference to Title 23 (if required in the Utility Agreements with the State) is not the responsibility of Willbros Butler.

Condition No. 53:

The "audit paragraph" in the contract between Willbros and the Joint Venture participants contains a "scope limitation" with respect to auditing "(a) costs of work performed and paid on a lump-sum basis and (b) calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs." In addition, the paragraph did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Questioned Costs

Criteria:

The Utilities Agreements with the Joint Venture participants require all cost records to be subject to inspection at any time by representatives of the Montana Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

Cause:

Willbros personnel were not aware of the requirement.

Effect:

Audit scope was limited, and professional services costs charged by Willbros and claimed for reimbursement by the utility companies could not be audited. Access to cost records by representatives of the MDOT and the FHWA was denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

Willbros Butler agrees with the recommendation; however, action would have had to originate with the Joint Venture participants in the originally proposed form of the agreement. It must be realized by all parties that there would have been significant impacts on contract language and costs with the citing of Titles 23 and 48 in the agreement.

Condition No. 54:

The "audit paragraph" in the contract between Willbros and Barnard Construction Company, Inc. contains a "scope limitation" with respect to auditing "(a) costs of work performed and paid on a lump-sum basis and (b) calculation of the percentage(s) used as markup(s) or multiplier(s) applied to other costs." In addition, the paragraph did not specifically provide access to the books and records by representatives of Federal and state regulatory agencies.

Criteria:

The Utilities Agreements with the Joint Venture participants require all cost records to be subject to inspection at any time by representatives of the Montana Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

Questioned Costs

Cause:

Willbros personnel were not aware of the requirement.

Effect:

Audit scope was limited. Access to cost records by representatives of the MDOT and the FHWA could be denied.

Recommendation:

Contract language should conform to the language in the Utilities Agreement.

Response:

Willbros Butler agrees with the recommendation; however, action would have had to originate with the Joint Venture participants in the originally proposed form of agreement. Had the agreement between Willbros Butler and the Joint Venture included appropriate language with respect to audit access, then Willbros Butler would have repeated the language in its subcontract agreements.

Condition No. 55:

Various construction subcontracts between Willbros and Barnard Construction Company, Inc., Powers Elevation Company, Inc., Chen-Northern, Inc., and Mattingly Testing Services, Inc. do not cite Title 23 of the Code of Federal Regulations (CFR) in the "compliance with laws" paragraph.

Criteria:

23 CFR 172.9 requires all documents related to the project to cite the applicable "cost principles".

Cause:

Willbros personnel were not aware of the requirement.

Effect:

Costs may be incurred and claimed for reimbursement that are not allowable under the applicable cost principles.

Recommendation:

Contract language should conform to the Federal regulations.

Questioned Costs

Response:

Willbros Butler agrees with the recommendation; however, action would have had to originate with the Joint Venture participants. had the agreement between Willbros Butler and the Joint Venture included a reference to Title 23, then Willbros Butler would have cited Title 23 in all subcontracts.

Condition No. 56:

Pursuant to the terms of the "Design and Construction Contract", as amended, part of the compensation to Willbros was in the form of a "risk fee". The contract amendment states: "This fee is estimated to be \$150,000. However, the actual charge will be based on the value of the radiographic inspection and construction subcontracts and, in any event, will not exceed ten percent (10%) of the value of the radiographic inspection and construction subcontracts."

Criteria:

Title 23 of the Code of Federal Regulations (CFR), part 172.9 states, in part, that "compensation based on cost plus a percentage of cost or percentage of construction costs shall not be used."

Cause:

Willbros personnel were not initially aware that federal dollars were involved in the project; accordingly, the contract was written with provisions common in Willbros standard "commercial" contracts.

Effect:

The contract language is in violation of the applicable federal regulations. The resulting "risk fee" costs charged the utility companies and claimed for reimbursement do not meet the requirements of Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments" because they are in violation of other federal regulations.

Recommendation:

Contract language should conform to federal regulations so costs claimed for reimbursement on the project are allowable.

Questioned Costs

Response:

While this fee may not be acceptable under Title 23 of the CFR, it must be recognized that: 1) the agreement between the Joint Venture and Willbros Butler did not cite Title 23; 2) the Joint Venture and MDOT reviewed and accepted the form of the agreement; and 3) MDOT requested revised contract language in Amendment 1 that redefined the fee due Willbros Butler for construction and radiographic inspection.

MONTANA DEPARTMENT OF TRANSPORTATION (MDOT):

Condition No. 57:

The utility companies and related consulting engineering firms did not comply with various procedural requirements for a utilities relocation project as outlined by the Montana Department of Transportation (MDOT). The utility companies also did not comply with the "cost principles" referenced in the Federal Aid Highway Program Manual, 6-6-3-1.

Criteria:

Titles 23 (included in the Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations prescribe procedures and cost principles for utility relocation projects.

Cause:

The methods and means used by the MDOT to communicate the requirements of the applicable regulations are not adequately designed to assure the utilities understand the importance of complying with the requirements.

Effect:

Some of the utilities contracted with consultants prior to obtaining appropriate approval from the MDOT. Some of the utilities started work on the project before receiving authorization to proceed. Some of the utilities incurred costs prior to receiving appropriate authorization to proceed. Most of the utilities claimed costs for reimbursement that did not meet the "allowability" criteria of the applicable cost principles.

Questioned Costs

Recommendation:

The MDOT should evaluate the methods and means currently used to communicate the requirements of a utilities relocation project to participating utilities to determine whether improvements can be made. Possible improvements might include (but are not limited to) the following: 1) expanding the reference to the applicable regulations in the Utilities Agreement to include a general description of their content; 2) specifically stating in the Utilities Agreement that reimbursement for claimed costs is dependent on compliance with all applicable provisions of laws and regulations; and 3) incorporating the current "packet" given to participants as an addendum to the Utilities Agreement.

Response:

See the letter following this report.

Condition No. 58:

The "Facilities Adjustment Agreement" between the MDOT and Lockwood Water Users Association (LWUA) did not cite federal regulations governing the procedural aspects of the relocation or the applicable cost principles.

Criteria:

Titles 23 (included in Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2) and 48 of the Code of Federal Regulations contain guidance concerning procedures and cost principles for a utility relocation project.

Cause:

The agreement with LWUA was not a "standard" agreement, and the appropriate cites to laws and regulations were not included.

Effect:

LWUA incurred costs for a consulting engineer without first obtaining approval from the Federal Highway Administration. (See accompanying Schedule of Findings and Questioned Costs.)

Questioned Costs

Recommendation:

The MDOT should review and, if necessary, revise its contract preparation procedures to ensure contracts contain references to the appropriate regulations. A one-page "checklist" of critical items might be developed and used when non-standard contracts are prepared.

Response:

See the letter following this report.

Condition No. 59:

Various contracts executed pursuant to the Utilities Agreements and Facilities Adjustment Agreement included inappropriate language (e.g. audit scope limitation and "risk fee" compensation) or no language (e.g. reference to applicable cost principles).

Criteria:

Contractual language should be consistent with the Utilities Agreements and Facilities Adjustment Agreement.

Cause:

The utility companies did not understand certain of the requirements for contracts made pursuant to the primary agreements executed with the MDOT. The MDOT's internal review procedures did identify some of the omissions in the related contracts; however, there was not adequate follow-up to ensure the contractual problems identified were resolved.

Effect:

Some costs claimed for reimbursement did not meet the requirements of the applicable cost principles. The MDOT's ability to adequately audit costs claimed was restricted due to inappropriate contractual language.

Questioned Costs

Recommendation:

The MDOT should evaluate the methods and means currently used to communicate to utility companies the requirements of contracts executed pursuant to Utilities Agreements to determine whether improvements can be made. The MDOT should also evaluate its internal procedures for resolving deficiencies identified during its own review of contracts executed pursuant to the Utilities Agreements.

Response:

See the letter following this report.

Total questioned costs

\$ 841,408



INDEPENDENT AUDITOR'S REPORT ON ADDITIONAL CONTRACTUAL REQUIREMENTS

To the State of Montana
Department of Transportation and
Office of the Legislative Auditor

We have audited the accompanying schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 4-2(10)45 - Laurel Bridge and have issued our report thereon dated November 30, 1993.

We were engaged to audit the accompanying schedule of the pipeline relocation portion of project costs for Federal Highway Project BRF 16-1(27)1 - East Bridge-Billings, and we have issued our report thereon dated November 30, 1993. We disclaimed an opinion on the schedule because we were unable to audit the base rates and percentage(s) used as markup(s) or multiplier(s) applied to labor costs charged by the prime contractor, Willbros Butler Engineers, Inc., on that portion of the East Bridge-Billings project performed as a joint venture by Montana-Dakota Utilities Co., Cenex, Exxon Pipeline Company, Yellowstone Pipe Line Company, and Conoco Pipe Line Company.

The above-described work was performed pursuant to the terms of a contract dated August 25, 1993 with the Montana Department of Transportation (MDOT) and the Office of the Legislative Auditor. The contract included certain audit objectives in addition to performing a financial audit of the schedules of the utility relocation portion of project costs referred to in paragraphs one and two above. The purpose of this report is to communicate the results of those additional audit objectives.

1) OBJECTIVE:

Express an opinion on compliance with applicable state and federal laws by all parties.

SCOPE AND METHODOLOGY:

We requested and received from the Montana Department of Transportation copies of state and federal laws and regulations considered applicable to the audit. We were provided with the following:

- a. Federal-Aid Highway Program Manual 6-6-3-1 and 6-6-3-2.
- b. Copies of applicable sections of Titles 23 and 48 of the Code of Federal Regulations.
- c. State of Montana Department of Highways Utilities Manual.

In addition to the above documents, we used Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Governments".

We reviewed compliance with the provisions of the above documents, as applicable, in relation to our audit of costs claimed for reimbursement by each of the participants in the utility relocation projects cited in paragraphs one and two of this report.

Our methodology included inquiry of project managers and other persons at the entities who were involved in developing the cost claims submitted to the MDOT for reimbursement to determine their knowledge of applicable laws and regulations. We established cost materiality limits for each of the utilities based on their respective shares of total costs incurred. We reviewed costs claimed for reimbursement that were over the materiality limit for compliance with the laws and regulations cited above.

FINDINGS:

Our findings on compliance with applicable laws and regulations are included in the accompanying Schedule of Findings and Questioned Costs. In our opinion, the significant instances of noncompliance were -

- a. the failure of Lockwood Water Users Association to obtain prior approval from the Federal Highway Administration for contracting with a consulting engineering firm;
- b. costs claimed for reimbursement by Conoco Pipe Line Company (Glacier) that did not meet the "allowability" criteria of OMB Circular A-87;
- c. the restrictive language in the audit paragraph of the "Design and Construction Contract" between the Joint Venture participants and Willbros Butler Engineering, Inc. (Willbros) which resulted in an inability to perform an audit of project costs;
- d. the provision in the contract cited in c. above allowing a portion of the compensation paid to Willbros to be based on a percentage of direct construction costs which resulted in significant questioned costs; and
- e. the Montana Department of Transportation's failure to obtain the necessary contract amendment(s) to correct the deficiencies cited in c. and d. above.

CONCLUSIONS:

In our opinion, all parties (i.e. Exxon Pipeline Company and the Montana Department of Transportation) involved in the Laurel Bridge utility relocation project referred to in paragraph one above complied, in all material respects, with the applicable state and federal laws and regulations.

We are unable to express an opinion with respect to the East Bridge-Billings utility relocation project referred to in paragraph two of this report because the scope limitation was so significant as to preclude us from performing an audit on the project. However, with respect to the items tested, Montana Sulphur & Chemical Company complied, in all material respects, with the applicable state and federal laws and regulations. The other utility companies involved in the East Bridge-Billings relocation project (i.e. Lockwood Water Users Association, Conoco Pipe Line Company, Montana-Dakota Utilities Co., Cenex, Exxon Pipeline Company, and Yellowstone Pipe Line Company) and the Montana Department of Transportation, with respect to the items tested, did not comply in all material respects with the applicable state and federal laws.

2) OBJECTIVE:

Conclude on the reasonableness of estimating procedures used by the utility companies and Willbros Butler Engineers, Inc.

SCOPE AND METHODOLOGY:

The scope of our audit work to accomplish this objective included the following:

- a. a review of the estimating procedures used by Exxon Pipeline Company in the Laurel Bridge utility relocation project;
- b. a review of the estimating procedures used by each of the utility companies participating in the East Bridge-Billings utility relocation project; and
- c. a review of the estimating procedures used by Willbros Butler Engineers, Inc. as the prime contractor for the utilities that formed a Joint Venture to accomplish their utility relocation for the East Bridge-Billings.

Our audit methodology to accomplish the above-stated objective included the following procedures:

a. We engaged a consulting engineering firm, Morrison Maierle/CSSA, Inc. (MM/CSSA) to provide technical support for our evaluation of the reasonableness of the estimating procedures used.

- b. We met with MM/CSSA and, with their assistance, developed an understanding of the procedures generally followed in the industry to develop estimates for utility relocation projects. MM/CSSA discussed with us the types of documents typically prepared in connection with an engineering estimate, including such items as the "scope of work", "plans and drawings", "materials listings", and "technical specifications".
- c. We met with the project manager for each project and each utility involved to discuss their methodology used in developing the engineering estimates. We also met with the project manager for Willbros Butler Engineers, Inc.
- d. We reviewed documentation related to the engineering estimates to determine whether documents described by MM/CSSA, including the scope of work, plans and specifications and other documents, were prepared. Our review was limited principally to the existence of documents and did not consist of a detailed review of their content.
- e. We discussed the results of our review and inquiry with MM/CSSA to determine whether the estimating procedures used by the various utilities were appropriate in the circumstances.

FINDINGS:

A key consideration in evaluating the reasonableness of the estimating procedures used is whether the estimates adequately predicted the final "as built" costs for the project. If significant differences exist, there should be reasonable explanations for the differences. Following are our findings for each of the projects in relation to this evaluative criteria.

Laurel Bridge Utility Relocation Project

The original estimated cost for this project was approximately \$225,000 less than the final "as built" cost. Principal reasons for the significant variance include the following:

- a. The contractor from whom the original estimate was requested appears, in hindsight, to have substantially underestimated the construction costs for virtually all phases of the project.
- b. The original estimate was made approximately one and one-half years prior to the start of construction on the project. This time lapse during a period of generally rising construction costs would have an adverse effect on the accuracy of the estimate.

c. Due to right-of-way problems the actual route used for the pipeline relocation changed from the route used in the original estimate. The actual route used was approximately 1,200 feet longer than the route used to prepare the estimate. This change also had an adverse effect of the accuracy of the estimate.

East Bridge-Billings Utility Relocation Project

Montana Sulphur & Chemical Company - The original estimated cost of the project exceeded the "as built" cost by approximately 5%. This difference is not considered significant.

Lockwood Water Users Association (LWUA) - The final "as built" cost for LWUA's portion of the project exceeded the original estimate by approximately \$136,000. There were several factors contributing to the significant difference between the original estimate and the actual "as built" cost.

- a. The Montana Department of Transportation requested that the original estimated cost for "bore and jacking" the road and railroad crossings be reduced from the amount submitted by the engineer. The "as built" costs exceeded the engineer's original estimate. In total, the construction contract exceeded the original estimate by approximately \$89,000.
- b. Engineering and construction supervision costs were approximately \$28,000 over the original estimate due primarily to complexities encountered in the road and railroad crossings and construction delays.
- c. Other costs, including legal costs relating to route relocation and right-of-way matters, accounted for the remaining difference between the original estimated costs and the "as built" costs.

Conoco Pipe Line Company (Glacier) - The original estimate for the Glacier pipe line relocation (approximately \$172,400) was exceeded by approximately \$380,300. Significant factors contributing to the difference between the estimated costs and final "as built" costs included the following:

- a. Right-of-way related costs exceeded the estimate by approximately \$8,000, primarily due to access costs imposed by Yellowstone County.
- b. Material costs increased by approximately \$2,600. The increase is principally attributable to increases in prices between the date of the original estimate (March 1990) and the date of actual construction (May 1991).

- c. Actual construction costs exceeded the original estimate by approximately \$251,100. The original construction cost estimate was based on an estimate received from an independent pipeline engineering/construction firm with experience in this type of pipeline relocation. This is a common practice in the industry. Such estimates are provided in exchange for the opportunity to bid the project when it is built. It is clear that the estimate was significantly understated. Conditions increasing the construction costs included the following:
 - 1) The necessity to construct a 400 foot sewer "diversion" (this condition became apparent only after a contractor began digging under the sewer and the nature of the underlying geology was revealed).
 - 2) Congestion in the construction area requiring numerous "crossings" of other buried utility lines.
- d. Company labor and overhead charges exceeded the original estimate by approximately \$110,000. The conditions described above extended the originally estimated time period which impacted costs. In addition, the project was overcharged for labor and material costs (see accompanying Schedule of Findings and Questioned Costs).

Montana Dakota Utilities Co. - The "as built" costs exceeded the original estimate by approximately \$420,000. Significant factors contributing to the additional costs included the following:

- a. Right-of-way related costs exceeded the estimate by approximately \$13,000, primarily due to access costs imposed by Yellowstone County.
- b. Material costs increased by approximately \$2,000. The increase is principally attributable to increases in prices between the date of the original estimate (March 1990) and the date of actual construction (August 1991).
- c. Actual construction costs exceeded the original estimate by approximately \$264,200. The original construction cost estimate was based on an estimate received from an independent pipe line engineering/construction firm with experience in this type of pipe line relocation. This is a common practice in the industry. Such estimates are provided in exchange for the opportunity to bid the project when it is built. It is clear that the estimate was significantly understated. Conditions increasing the construction costs included the following:

- 1) The necessity to construct a 400 foot sewer "diversion" (this condition became apparent only after a contractor began digging under the sewer and the nature of the underlying geology was revealed).
- 2) Congestion in the construction area requiring numerous "crossings" of other buried utility lines.
- d. Engineering design and construction management costs exceeded the estimate by approximately \$89,000. The original estimate was based on a percentage of construction costs (16% of estimated labor and materials). Final engineering design and construction management costs were close to 27% of actual labor and materials which had increased significantly as noted above.
- e. Company labor and overhead charges exceeded the original estimate by approximately \$40,300. The conditions described above extended the originally estimated time period which impacted costs. In addition, the overhead costs were computed based on total costs incurred; accordingly, as costs in other categories increased, the overhead costs charged to the project increased. (See related finding in the accompanying Schedule of Findings and Questioned Costs.)

Cenex - The "as built" costs exceeded the original estimate by approximately \$290,600. Significant factors contributing to the additional costs included the following:

- a. Right-of-way related costs exceeded the estimate by approximately \$15,700, primarily due to access costs imposed by Yellowstone County.
- b. Material costs increased by approximately \$52,900. The increase is due to increased pipe lengths and unit costs (approximately \$14,100); increased costs for fittings, bends and other materials (approximately \$19,400); and costs incurred to have the prime contractor act as purchasing agent (approximately \$16,500).
- c. Actual construction costs exceeded the original estimate by approximately \$176,500. The original construction cost estimate was based on an estimate received from an independent pipeline engineering/construction firm with experience in this type of pipeline relocation. This is a common practice in the industry. Such estimates are provided in exchange for the opportunity to bid the project when it is built. It is clear that the estimate was significantly understated. Conditions increasing the construction costs included the following:
 - 1) The necessity to construct a 400 foot sewer "diversion" (this condition became apparent only after a contractor began digging under the sewer and the nature of the underlying geology was revealed).

- 2) Congestion in the construction area requiring numerous "crossings" of other buried utility lines.
- d. Engineering and construction supervision costs exceeded the original estimate by approximately \$52,100. The estimate for this cost category was based primarily on other project costs; accordingly, as other costs increased this cost category increased as well.

Exxon Pipeline Company (EPC) - The "as built" costs exceeded the original estimate by approximately \$293,500. Significant factors contributing to the additional costs included the following:

- a. Right-of-way related costs exceeded the estimate by approximately \$17,300, primarily due to access costs imposed by Yellowstone County.
- b. Engineering and construction management costs exceeded the estimate by approximately \$93,700. The original estimate appears to have been based on EPC doing more work in this category; however, substantially all of the engineering and construction management was performed by a third-party contractor.
- c. Actual construction costs exceeded the original estimate by approximately \$185,700. The original construction cost estimate was based on an estimate received from an independent pipeline engineering/construction firm with experience in this type of pipeline relocation. This is a common practice in the industry. Such estimates are provided in exchange for the opportunity to bid the project when it is built. It is clear that the estimate was significantly understated. Conditions increasing the construction costs included the following:
 - 1) The necessity to construct a 400 foot sewer "diversion" (this condition became apparent only after a contractor began digging under the sewer and the nature of the underlying geology was revealed).
 - 2) Congestion in the construction area requiring numerous "crossings" of other buried utility lines.
- d. Company overhead charges exceeded the original estimate by approximately \$40,700. The overhead costs were computed based on total costs incurred; accordingly, as costs in other categories increased, the overhead costs charged to the project increased. (See related finding in the accompanying Schedule of Findings and Questioned Costs.)

Yellowstone Pipe Line Company (YPLC) - The "as built" cost for the YPLC pipeline relocation exceeded the original estimate by approximately \$58,900; however, the comparison is really not meaningful due to a change in the scope of work related to the YPLC pipelines. The original estimate was prepared based on moving two pipelines - a 4-inch line and an 8-inch line. However, just prior to the actual start of construction the 4-inch line was removed from the scope of work. No revised estimate was prepared for moving only the 8-inch line until after the project was completed. Accordingly, the original estimate cannot logically be compared to the "as built" cost.

While cost increases in the various categories cannot reasonably be quantified, it is appropriate to identify the categories where costs increased, and the reasons for the increases.

- a. Right-of-way related costs exceeded the estimate primarily due to access costs imposed by Yellowstone County.
- b. Engineering and construction management costs exceeded the estimate. The original estimate appears to have been based on YPC doing more work in this category; however, substantially all of the engineering and construction management was performed by a third-party contractor.
- c. Actual construction costs exceeded the original estimate. The original construction cost estimate was based on an estimate received from an independent pipeline engineering/construction firm with experience in this type of pipeline relocation. This is a common practice in the industry. Such estimates are provided in exchange for the opportunity to bid the project when it is built. It is clear that the estimate was significantly understated. Conditions increasing the construction costs included the following:
 - 1) The necessity to construct a 400 foot sewer "diversion" (this condition became apparent only after a contractor began digging under the sewer and the nature of the underlying geology was revealed).
 - 2) Congestion in the construction area requiring numerous "crossings" of other buried utility lines.
- d. Company overhead charges exceeded the original estimate. The overhead costs were computed based on total costs incurred; accordingly, as costs in other categories increased, the overhead costs charged to the project increased. (See related finding in the accompanying Schedule of Findings and Questioned Costs.)

Conoco Pipe Line Company (Seminoe) - The "as built" costs exceeded the original estimate by approximately \$206,700. Significant factors contributing to the additional costs included the following:

- a. Engineering and construction management costs exceeded the estimate by approximately \$18,800. The original estimate appears to have been based on Seminoe doing more work in this category; however, substantially all of the engineering and construction management was performed by a third-party contractor.
- b. Actual construction costs exceeded the original estimate by approximately \$190,200. The original construction cost estimate was based on an estimate received from an independent pipeline engineering/construction firm with experience in this type of pipeline relocation. This is a common practice in the industry. Such estimates are provided in exchange for the opportunity to bid the project when it is built. It is clear that the estimate was significantly understated. Conditions increasing the construction costs included the following:
 - 1) The necessity to construct a 400 foot sewer "diversion" (this condition became apparent only after a contractor began digging under the sewer and the nature of the underlying geology was revealed).
 - 2) Congestion in the construction area requiring numerous "crossings" of other buried utility lines.
- d. Company overhead charges exceeded the original estimate by approximately \$33,000. The overhead costs were computed based on total costs incurred; accordingly, as costs in other categories increased, the overhead costs charged to the project increased. (See related finding in the accompanying Schedule of Findings and Questioned Costs.)
- e. The above categories of actual costs exceeding the original estimate were offset, in part, by categories where the estimate was greater than the "as built" cost.
 - 1) Right-of-way costs were overestimated by approximately \$3,800.
 - 2) Materials costs charged to the project were approximately \$29,300 less than the original estimate. Costs charged to the project for line pipe were approximately \$19,200 less primarily because the "as built" length was less than the length estimated. Costs charged for fittings were approximately \$10,100 less than the estimate.

Willbros Butler Engineers, Inc. - Willbros prepared their first project cost estimate in January 1991. The estimate was based on information provided to Willbros by the various utility companies plus Willbros engineering assessment of the project costs as developed through performing the design phase of the project. The total estimate of approximately \$3.174 million exceeded the final "as built" cost of \$2.956 million by about 7%. Actual costs for engineering services and company-related costs exceeded the original estimate, while actual costs in other categories - notably construction costs - were less than the original estimate.

On a project of this size and complexity, the variances are not considered significant and, accordingly, no analysis of variances by individual cost categories is considered necessary.

CONCLUSION:

Based on the work performed, we believe the estimating procedures used by the utility companies and Willbros Butler Engineers, Inc. were reasonable in the circumstances. As noted above, the most significant differences between the estimated and actual costs occurred in the construction cost category. While it is unfortunate the construction cost estimate used by the utilities was understated, it was the best information available to the companies at the time. And in fairness to the company providing the estimate, many of the factors contributing to the increased construction costs could not reasonably have been anticipated at the time the original estimate was prepared.

3) OBJECTIVE:

Conclude on whether the utility companies and Willbros Butler Engineers, Inc. used adequate procedures for bidding contracts in accordance with Title 23 of the Code of Federal Regulations (CFR), Parts 635 and 645.

SCOPE AND METHODOLOGY:

The scope of our audit work to accomplish this objective included the following procedures:

- a. a review of 23 CFR 635 and 645 to determine the requirements for bidding contracts;
- b. a review of the procedures for bidding contracts used by Exxon Pipeline Company in bidding the construction contract for the Laurel Bridge utility relocation project;
- c. a review of the procedures for bidding contracts used by each of the utility companies participating in the East Bridge-Billings utility relocation project;

- d. a review of the procedures for bidding contracts used by Willbros Butler Engineers, Inc. as the prime contractor for the utilities that formed a Joint Venture to accomplish their utility relocation for the East Bridge-Billings; and
- e. on a test basis we reviewed selected significant bid contracts to determine that the procedures described were followed in all material respects.

Our audit methodology to accomplish the above-stated objective included the following procedures:

- a. We interviewed the project managers for each of the utilities and Willbros to gain an understanding of the normal procedures used by the companies in bidding contracts.
- b. We reviewed bid documents prepared by the utilities and Willbros for significant portions of the project.
- c. We noted that "qualified bidders lists" were prepared and bids solicited from companies on the list.
- d. We reviewed documentation of bid opening procedures, including identification of persons present and tabulations of bids submitted. On a test basis we confirmed that the bid information submitted was accurately tabulated on the bid summary.
- e. We determined that the contract was awarded to the lowest qualified bidder. Where this procedure was not followed, we discussed with the applicable parties the reason(s) for awarding the bid to other than the low bidder, and we assessed the propriety of that decision.
- f. For significant contracts, we inquired of management personnel whether a relationship existed with the contractor that would preclude an "arms-length" transaction. On a test basis we reviewed accounts payable records to learn the extent of non-project work performed by the contractor for the utility.

FINDINGS:

Laurel Bridge Utility Relocation Project

Exxon Pipeline Company (EPC) followed internal procedures and the provisions of 23 CFR 635 and 645 in awarding the construction contract for the above-referenced project.

East Bridge-Billings Utility Relocation Project

Montana Sulphur & Chemical Company (MSCC) - MSCC used a continuing contractor to perform the utility relocation work required as allowed by 23 CFR 645.115(b).

Lockwood Water Users Association (LWUA) - LWUA entered into contracts for both professional engineering and construction management services, and for the actual construction required under the project. With regard to the contract for professional engineering and construction maintenance services, we were unable to locate evidence of prior written approval by the Federal Highway Administration as required by 23 CFR 645.109(b). See related finding in the accompanying Schedule of Findings and Ouestioned Costs.

The contract for construction services was awarded to the lowest qualified bidder in accordance with LWUA procedures and the provisions of 23 CFR 645.

Conoco Pipe Line Company (CPLC) (Glacier) - CPLC contracted with a third party for relocating the Glacier pipe lines. The contract was initially awarded to a qualified low bidder; however, the contractor terminated the contract after encountering problems that could not be resolved with CPLC. The contract was bid again. The second time it was not awarded to the low bidder. CPLC provided reasons for choosing the other bidder (only two companies bid). The MDOT reviewed the reasoning and concurred with CPLC's selection.

Montana-Dakota Utilities Co. (MDU)

Cenex

Exxon Pipeline Company (EPC)

Yellowstone Pipe Line Company (YPLC)

Conoco Pipe Line Company (CPLC) - These companies formed a Joint Venture (JV) for the purpose of performing a joint relocation of their respective pipelines. A "Design and Construction Agreement" was signed by all parties in June 1990. Conoco, acting as the "lead" company for the JV, prepared a bid package to solicit bids from companies qualified to perform design engineering and construction management for the JV.

Three bids were received in response to the solicitation. Conoco initially began negotiations with the low bidder; however, they were unable to agree on contract terms - specifically inclusion of a "not to exceed" number. The entity (a joint venture) submitting the next lowest bid initially omitted including compensation for the construction management portion of the bid. Conoco also determined that the entity had no major river crossing experience.

Willbros Butler Engineers, Inc. (Willbros) was the highest and only remaining bidder. Conoco negotiated a contract with Willbros and submitted it to the other JV participants for approval. MDU voiced the only strong dissent to awarding the contract to Willbros. Accordingly, pursuant to the terms of the Agreement between the JV participants, the contract was awarded to Willbros by majority vote.

The contract between Willbros and the JV participants was executed October 8, 1990, prior to receiving approval from the MDOT as required by 23 CFR 645.109(b). Conoco, as the "lead" company in the JV, stated they were not aware of the requirement to obtain prior approval for consulting contracts. The MDOT was provided a copy of the contract. After extensive discussion of significant contract provisions, the MDOT, by letter dated December 21, 1990, provided "authorization to proceed with the relocation" retroactive to September 26, 1990. Such retroactive authorization served to validate consultant costs incurred under the contract.

Willbros Butler Engineers, Inc. (Willbros) - As prime contractor for the JV participants in the East Bridge-Billings relocation project, Willbros entered into a number of subcontracts for performance of various construction and construction-related services. The primary subcontract for the construction portion of the project was awarded to the low bidder in accordance with the provisions of 23 CFR 635 and 645, and with the concurrence of the MDOT. Other subcontracts for such services as pipeline survey, radiographic inspection and cultural resource consulting were also awarded to the low bidders. A contract for materials testing services was not awarded on the basis of competitive bidding; however, the contract was for less than \$5,000.

CONCLUSIONS:

Except for LWUA's contracting for professional consulting services in relation to the East Bridge-Billings pipeline relocation project, the utility companies and Willbros Butler Engineers, Inc. used adequate procedures for bidding contracts in accordance with 23 CFR Parts 635 and 645. Nothing came to our attention to indicate the contractual relationships were less than "arms-length".

4) OBJECTIVE:

Conclude on whether the utility companies realized profits on the Laurel Bridge and East Bridge-Billings relocation projects.

SCOPE AND METHODOLOGY:

Our audit work included examining support for costs charged to each of the above projects by the respective utility companies. We examined support for individual costs incurred over the following minimum materiality limits:

Laurel Bridge Utility Relocation Project -

Exxon Pipeline Company	\$4,000
East Bridge-Billings Utility Relocation Project -	
Montana Sulphur & Chemical Company	400
Lockwood Water Users Association	2,400
Conoco Pipe Line Company (Glacier)	3,200
Montana-Dakota Utilities Co.	3,400
Cenex	3,400
Exxon Pipeline Company	3,600
Yellowstone Pipe Line Company	3,200
Conoco Pipe Line Company (Seminoe)	3,200

Our purpose in reviewing the supporting documentation for these costs was to determine whether the costs met the "cost principles" criteria contained in the Office of Management and Budget (OMB) Circular A-87, "Cost Principles for State and Local Government". These cost principles do not contain elements of profit. If the claimed costs met the cost principles criteria of OMB Circular A-87, by definition they are not considered profit.

The nature of the supporting documentation reviewed for various claimed costs was dependent on the type of cost incurred. Costs paid to third parties for materials, contracted services and similar costs were traced to invoices, contracts or other documents received from those third parties. Company personnel costs claimed were traced to supporting time records and pay rates. Company personal expenses (e.g. travel) was traced to expense reports itemizing the charges incurred. Labor burden and overhead costs which are based on a percentage of other direct costs incurred were reviewed by examining the methodology and support for developing the applicable rates.

FINDINGS:

The accompanying Schedule of Findings and Questioned Costs identifies those claimed costs that do not meet the cost principles criteria in OMB Circular A-87. However, not all questioned costs represent profit to the utility companies. Many of the costs were incurred and paid to third parties. To the extent they were paid out, they represent project costs even though they may not be "allowable" for purposes of determining cost reimbursement.

Following is a summary of questioned costs considered to be profit to the utility companies because they were not paid out to third parties. They represent company costs that were incorrectly charged to the project and claimed for reimbursement. The costs are listed in the order they appear in the accompanying Schedule of Findings and Questioned Costs. Please refer to that schedule for a more detailed explanation of the nature of the questioned cost.

East Bridge-Billings Utility Relocation Project -

Conoco Pipe Line Company (Glacier) - Direct labor not incurred Direct labor overcharged Personal costs overcharged Labor burden costs overcharged Overhead overcharged		\$34,520 11,201 3,045 10,619 7,142 \$ 66,527
Montana-Dakota Utilities Co Unauthorized labor and burden costs Unallowed employee benefit costs Overhead overcharged		\$ 929 2,793 21,233 \$ 24,955
Cenex - Material costs overcharged		\$ 8,340
Exxon Pipeline Company - Overhead overcharged		<u>\$ 43,643</u>
Yellowstone Pipe Line Company - Unauthorized labor and burden costs Material costs overcharged Overhead overcharged		\$ 1,493 3,557 36,598 \$ 42,008
Conoco Pipe Line Company (Seminoe) - Unauthorized labor and burden costs Material costs overcharged Overhead overcharged		\$ 2,021 2,981 48,093 \$ 53,095

ANDERSON ZURMUEHLEN & CO., P.C.

CERTIFIED PUBLIC ACCOUNTANTS & BUSINESS CONSULTANTS

CONCLUSION:

The utility companies listed in the "findings" above realized profit on the utility relocation project contracts with the MDOT due to claiming costs for reimbursement that did not meet the applicable cost principles criteria.

This report is intended for the information of the Montana Department of Transportation, the State of Montana Office of the legislative Auditor, the Federal Highways Administration and the participating utilities. However, this report is a matter of public record and its distribution is not limited.

Anderson Jur Muchlen & Co., A.C. Helena, Montana

November 30, 1993



Marc Racicot, Governor

March 25, 1994

Anderson ZurMuehlen & Company 6th & Last Chance Gulch Helena, MT 59624

Subject: Utility Relocation Audit

BRF 16-1(27)1 East Bridge-Billings

BRF 4-2(10)54 Laurel Bridge

I am transmitting our response to the audit performed by your firm on the utility relocation projects BRF 16-1(27)1 East Bridge-Billings and BRF 4-2(10)54 Laurel Bridge.

Thank you for your staff's effort and cooperation during this audit.

If you have questions concerning our response, please call me at 444-6201.

Marvin Dye

Director of Transportation

Recommendation # 1

The MDOT should work with the utility companies to establish documentation guidelines for costs claimed for reimbursement. The guidelines should specifically describe the minimum documentation criteria.

They should emphasize that cost claims not meeting the documentation criteria will not be processed for payment.

Response

Partially Concur

The MDOT provides a documentation, guidelines and procedures packet for costs claimed for reimbursement. The packet prescribes procedures and formats for preparing estimates and the final bill. In addition, the packet and the utility agreement signed by the utility company references the FHPM, which describe the minimum documentation criteria.

Utilities are not required to submit breakdown of costs for progress bills. A breakdown of all costs is required on the final bill. Desk audits or site audits are performed on the final bill to determine contract compliance and cost eligibility.

The MDOT will evaluate the current process to determine if additional information should be supplied by the utility companies to support progress and final bills. It will also address cost claims that do not meet the documentation criteria.

Recommendation #2

The MDOT should evaluate the methods and means currently used to communicate the requirements of a utilities relocation project to participating utilities to determine whether improvements can be made.

Possible improvements might include (but are not limited to) the following:

- 1. Expanding the reference to the applicable regulations in the Utilities Agreement to include a general description of their content
- 2. Specifically stating in the Utilities Agreement that reimbursement for claimed costs is dependent on compliance with all applicable provisions of laws and regulations

3. Incorporating the current "packet" given to participants as an addendum to the Utilities Agreement

Response

Concur

The authorization letter sent to the Utility Company advising them of the utility plan-in-hand and the starting date for all costs, also requests a cost estimate be prepared. It states "These items are to be prepared as outlined in the Federal-aid Highway Program Manual (FHPM) 6-6-3-1, as established by the Federal Highway Administration, to assure Federal Participation in the relocation costs. If you do not have a copy of this, please advise".

The language in this document clearly advises the utility companies of its responsibility to comply with the Federal and State guidelines to assure reimbursement.

The MDOT will evaluate the current process for informing the utility companies the requirements of a utilities relocation project.

As additional notification, we will implement the following:

- When the utility agreement is submitted to the utility company for signature, language can be included in the authorization letters, rather than the utility agreement.
- 2. In the authorization letter that is distributed to the utility company advising that the utility agreement is approved, language can be included advising the utility of its obligation to comply with Federal and State requirements.
- 3. When the District authorizes the utility to proceed with work, similar language can be included in the authorization letter.
- 4. The utility agreement will be evaluated to determine if language should be included indicating that reimbursement for claimed costs is dependent on compliance with all applicable provisions of laws and regulations.

Recommendation # 3

The MDOT should review and, if necessary, revise its contract preparation procedures to ensure contracts contain references to the appropriate regulations. A one-page "checklist" of critical items might be developed and used when non-standard contracts are prepared.

Response

Partially Concur

The agreement was a nonstandard agreement. This Facilities Adjustment Agreement was reviewed by Right of Way and Legal staffs at the time of negotiations. The Agreement was felt to contain the appropriate language as Lockwood Water Users Association (LWUA) was determined "not a utility" by MDOT Chief Legal Counsel. Therefore, the negotiations were handled as a right of way acquisition not a utility relocation. This is covered by 23 CFR Subchapter H-Right of Way and Environment and Title 49 Part 24- Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs as well as the Right of Way Manual.

In the interest of better awareness for contractors employed by the property owner, MDOT will review the procedures to determine if a checklist should be developed to provide specific federal and right of way requirements on agreements of this kind. It should be noted this is not a typical right of way negotiation or agreement.

Recommendation # 4

Internal procedures should be reviewed and revised as necessary to ensure that critical issues identified during contract reviews performed by the audit division are resolved before significant costs are incurred on the project.

Response

Do Not Concur

The East Bridge project had unanticipated problems and questions regarding Federal-Aid participation, primarily because the utility companies entered into an agreement with Willbros Butler, prior to, and without the knowledge or approval of the MDOT.

In December 1990, the Federal Highway Administration, the Billings District, Compliance Review Section and the Utility Section along with representatives of the Pipeline Companies and Willbros Butler jointly addressed the specific areas of concern. At that time it was determined the critical problems were addressed, although some questions remained to be resolved. In the interest of keeping this project moving forward and based on an administrative decision, the FHWA determined the costs would be eligible for Federal-Aid participation.

Additional financial information regarding costs was requested from the Pipeline Companies and Willbros Butler, which was never received. Many of the remaining questions and concerns could not be resolved without an independent audit of all costs expended. The revised utility agreements were approved by FHWA in March 1992, subject to audit by a qualified, independent auditor.

Internal procedures are in place to assure that critical issues identified during the contract reviews are resolved before the utility agreements are approved.

Every utility agreement and consultant contract is reviewed by the Compliance Review Section, and where critical issues are identified they are resolved before the contracts and agreements are approved.

Recommendation # 57

The MDOT should evaluate the methods and means currently used to communicate the requirements of a utilities relocation project to participating utilities to determine whether improvements can be made.

Possible improvements might include (but are not limited to) the following:

- 1) expanding the reference to the applicable regulations in the Utilities Agreement to include a general description of their content.
- 2) specifically stating in the Utilities Agreement that reimbursement for claimed costs is dependent on compliance with all applicable provisions of laws and regulations
- 3) incorporating the current "packet" given to participants as an addendum to the Utilities Agreement.

Response

Concur

Same as Recommendation #2

Recommendation # 58

The MDOT should review and, if necessary, revise its contract preparation procedures to ensure contracts contain references to the appropriate regulations. A one-page "checklist" of critical items might be developed and used when non-standard contracts are prepared.

Response

Partially Concur

Same as Recommendation #3

Recommendation # 59

- A. The MDOT should evaluate the methods and means currently used to communicate to utility companies the requirements of contracts executed pursuant to Utilities Agreements to determine whether improvements can be made.
- B. The MDOT should also evaluate its internal procedures for resolving deficiencies identified during its own review of contracts executed pursuant to the Utilities Agreements.

A. Response

Partially Concur

The standard Utility Agreement states "The utility will comply with the Federal Aid Highway Program Manual, 6-6-3-1 and 6-6-3-2 dated September 6, 1985, and subsequent amendments, and also the laws of the State of Montana".

The language in this document advises the utility companies of its responsibility to comply with the Federal and State guidelines to assure reimbursement. This document also outlines the procedures when contracting with consultant and contractors by the utility company.

The MDOT will evaluate the current process for informing the utility companies the requirements of a utilities relocation project.

To assure that Utility Companies using contractors or consultants comply with the applicable laws and regulations, MDOT may include the following language in the Utility agreement:

" A contractor or consultant employed by the Utility Company will comply with all provisions of 23 CFR and 48 CFR and related laws and regulations. The Utility will require similar language be included in all contractor/ consultant agreements".

As additional notification, MDOT will implement the following:

- 1. When the utility agreement is submitted to the utility company for signature, language can be included in the authorization letters, rather than the utility agreement.
- 2. In the authorization letter that is distributed to the utility company advising that the utility agreement is approved, language can be included advising the utility of its obligation to comply with Federal and State requirements.
- 3. When the District authorizes the utility to proceed with work, similar language can be included in the authorization letter.

B. Response

Do Not Concur

Same as recommendation #4





